COUNTRY CLIPPER®

*First With Innovations That Last*

# 2009 Update Manual

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Country Clipper Model Identification Chart


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# Country Clipper Update Manual
# Kit # 629EB-001A

## EFI Wiring

**Addresses wiring issues among designated serial numbers of The Boss using 28 hp EFI engines**

# Country Clipper Update Kit # 629EB-001A

**Country Clipper has identified up to four wiring issues that may affect early 28 hp EFI mowers. While each mower may not realize all issues, a new kit is available to resolve them:**

1. Protection of the Fuel Line
2. Diagnostic Light incorrectly positioned; New control panel Decal
3. Incorrect Diagnostic Light function
4. Incorrect Hour Meter function; Oil Pressure Switch replacement

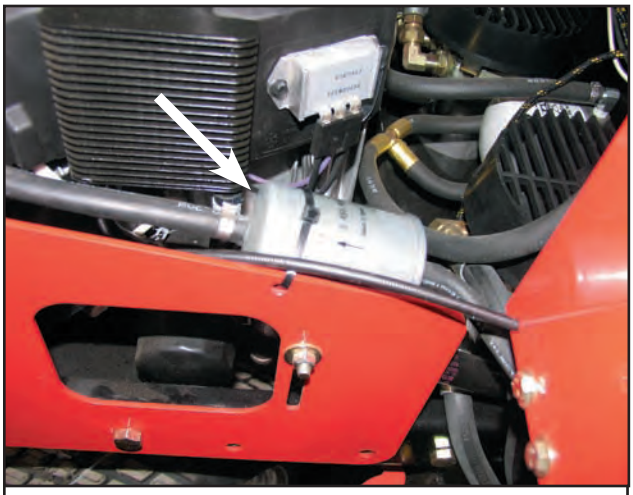
The new kit addresses issues of mowers **prior to and including** Serial Numbers listed below. Mowers produced after these serial numbers are not affected.

| Model | Serial Number |
|---|---|
| 2852KOJ8-SR1205 | 647BA00000001 |
| 2860KOJ8-SR1205 | 647BD00000026 |
| 2872KOJ8-SR1205 | 647BG00000012 |
| 2860KOT8-SR1205 | 647BM00000014 |
| 2852KOT8-SR1205 | 647BN00000003 |
| 2872KOT8-SR1205 | 647BO00000010 |

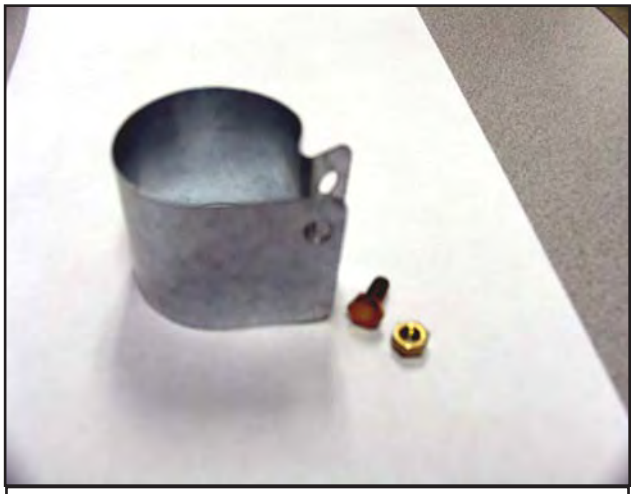
**Parts List: Update Kit # 629EB-001A**

| | |
|---|---|
| H-1094 | Plastic Plug |
| E-5058 | Red Copper Wire #16 |
| E-5071 | White Copper Wire #16 |
| E-5074 | Black Copper Wire #16 |
| E-5059 | Terminal, Blue, 16-14 Wires |
| E-5884 | Cable Tie, Nylon, 8” |
| E-6078 | Disconnect, Female |
| E-6458 | Disconnect, Female, Nylon |
| E-6098 | Packard Terminal, Female |
| P-11533 | Decal, Rh Fender Cap EFI |
| H-2336 | Hose Clamp |
| 629-651P | Bracket, Fuel Filter, 2” |
| F-1158 | Hex Nut, lock, 1/4-20 |
| F-1558 | Capscrew, 3/8-16 X 7/8, Yellow Plated |
| E-6277 | Seat Switch, Relay Volt |
| 629-674P | Trim Edge 3” |
| 629-675P | Trim Edge 4” |

## Issue 1: Securing and Protecting the Fuel Line on early 28 hp EFI Mowers



**1** Locate the EFI fuel filter that is tied to the engine guard (right side). Remove the tie strap holding it in place.

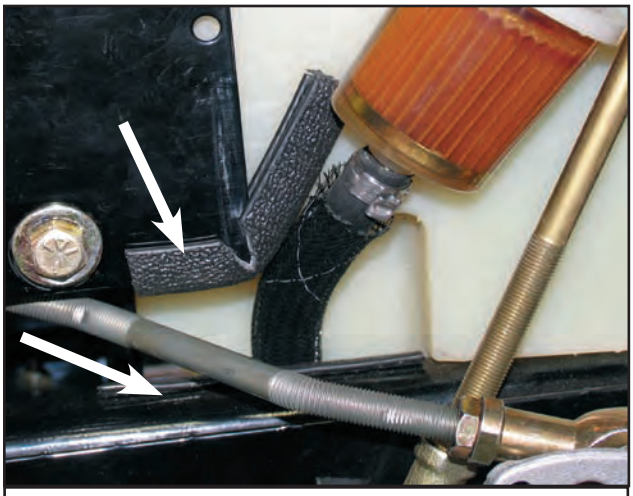


**2**

| | |
|---|---|
| Clamp | part # 629-651P; |
| Bolt | part # F-1558; |
| Nut | part # F-1158; all provided in kit |

**3** Place clamp around the filter. Secure filter to the engine guard with bolt & nut provided in the kit.

**4** Note the two pieces of trim: One is cut to bend 90$^0$ and the other is straight.



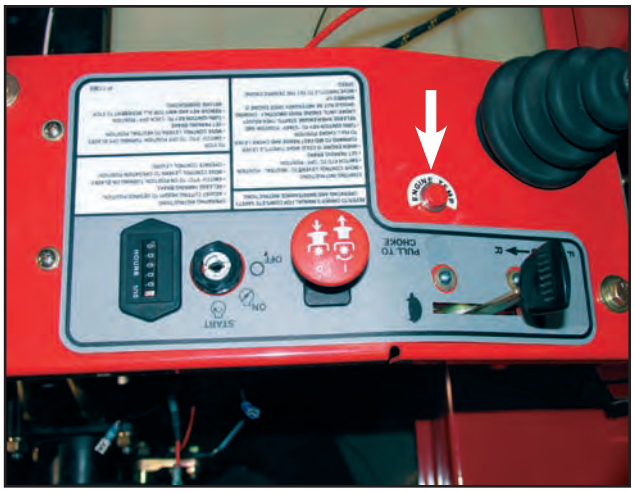
**5** Place angled trim on edge of side panel just above lower linkage. Place the straight piece on edge of frame.

**6** **Locate the hole directly below the front arm rest hole. Pull the fuel line up and tie it in the hole with wire tie.**

**7** **Pull the tie securely, but not so much as to stop fuel flow.**

**Issue: 2** **Changing the control panel Decal and Diagnostic Light.**

**Some early EFI machines have the wrong control panel Decal. This decal can be identified by the white background on the start, stop, and operating instructions.**



## 1

Remove the old decal by first removing the Hour Meter, Clutch Switch, and Key Switch. (Note the location of the Diagnostic Light; It is not in the correct position.)

## 2

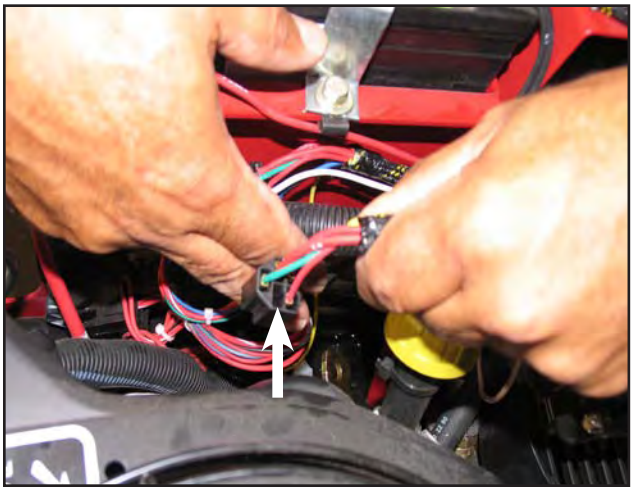
Apply the gray EFI decal provided in the kit by aligning its cut-outs with those on the fender.

Also, remove the Diagnostic Light and place it in the hole marked “Engine” on the new decal. Place the plastic plug **(Part # H-1094)** in the hole vacated by the light. Re-install the Hour Meter, Clutch Switch, and Key Switch.

## Issue: 3 Connecting the Diagnostic Light to the engine.

**The diagnostic light does not work. Using the white wire provided in the kit, the engine must be connected to the diagnostic light.**

**1** Near left front of engine, disconnect the terminal that connects the mower harness to engine.



**2** Note the empty slot on the mower side of the engine plug.

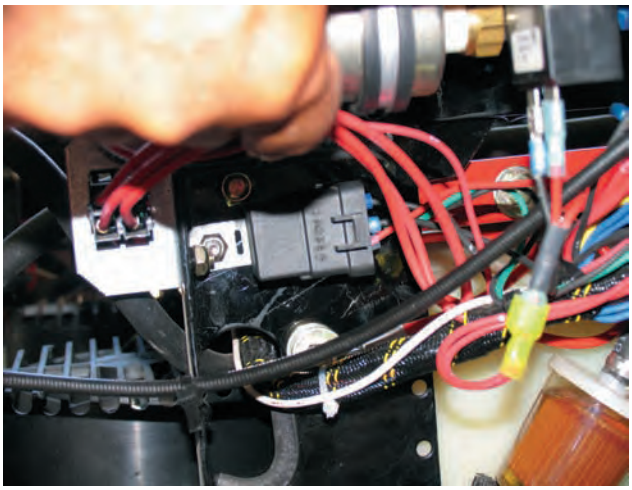
**3** Place the white wire's bare terminal into the empty slot on the mower side of the engine plug.

**4** Verify the wire has snapped into place. Then, reconnect the engine plug.

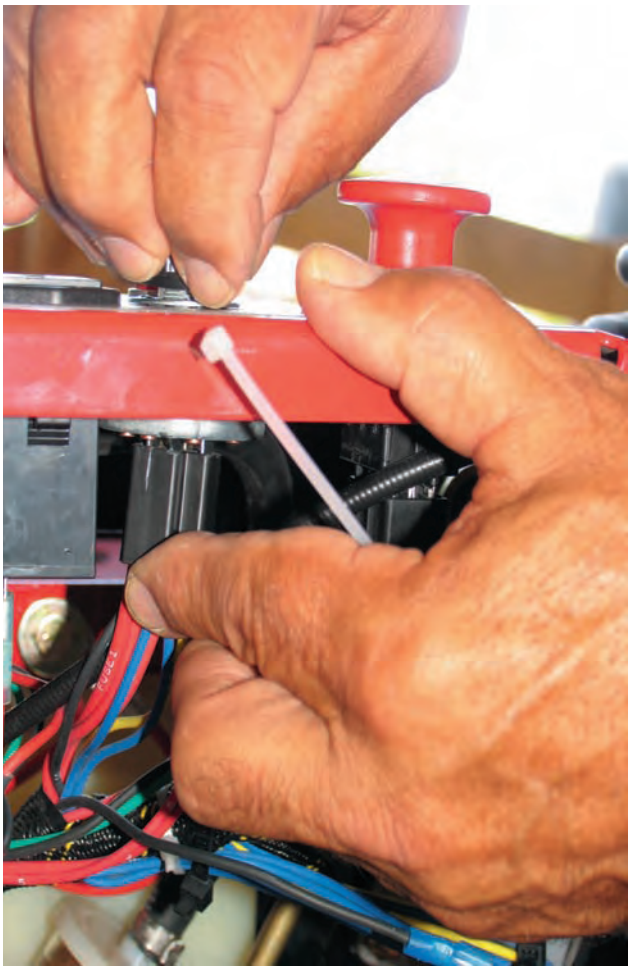
**5** Route the white wire along the tractor harness back toward the control panel.

**6**

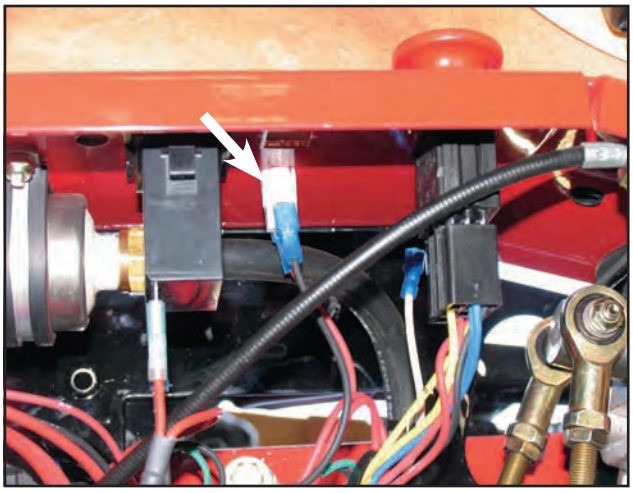
**7** Tie the white wire to the tractor harness with wire ties from the kit. Note photos 6, 7, and 8.



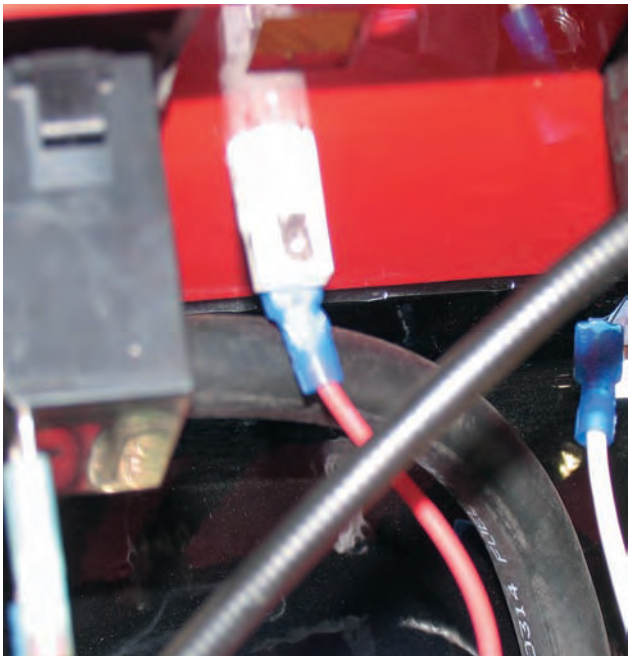
**8**



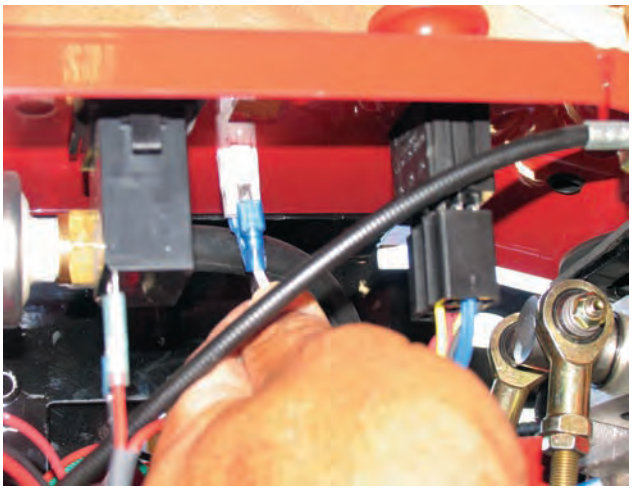
**9** Remove the key switch from the fender cap to provide additional visibility.



**10** Locate the engine code light in the fender cap.

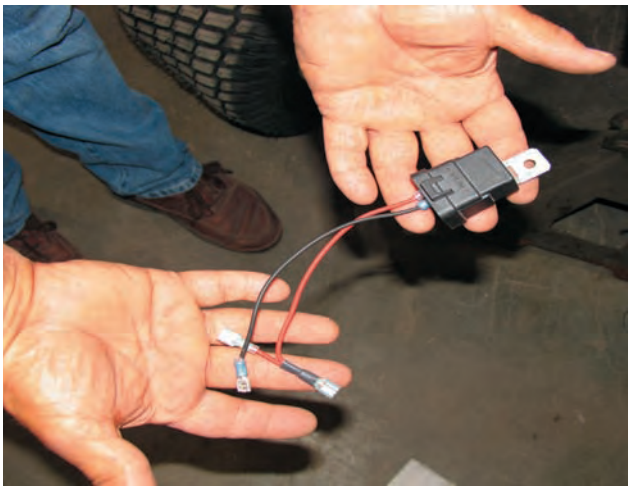


**11** Unhook the black wire from the light and tie it back along the harness.



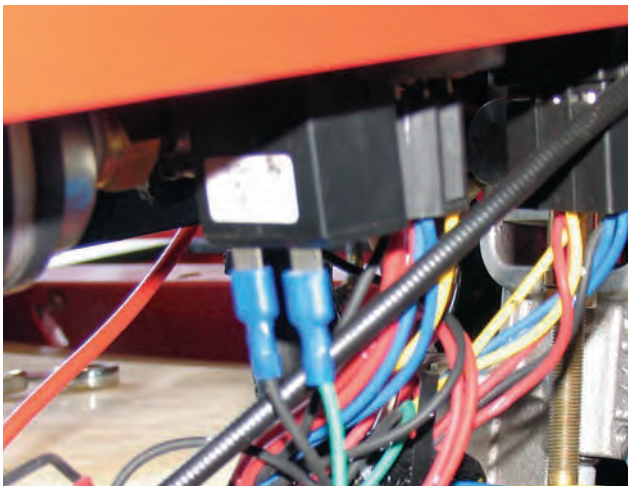
**12** Plug the covered terminal of the new white wire into the vacated terminal on on the light. Then replace the key switch.

## <u>Issue 4</u>: The Hour Meter does not work.



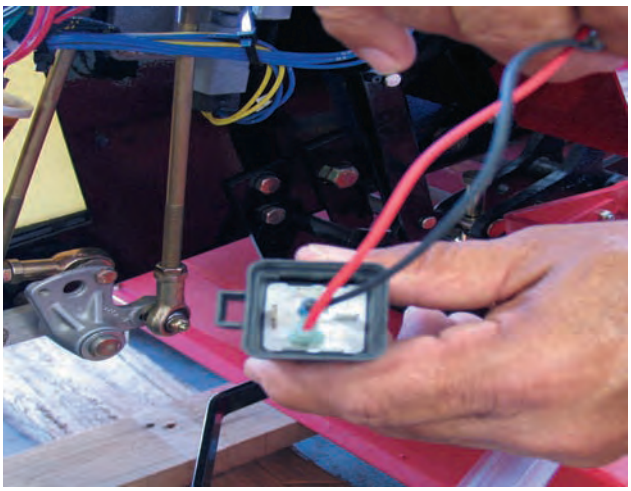
**1**

**Note the relay provided in the kit.**



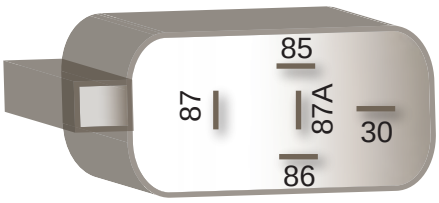
**2**

**Remove the black and green wires connected to the hour meter.**

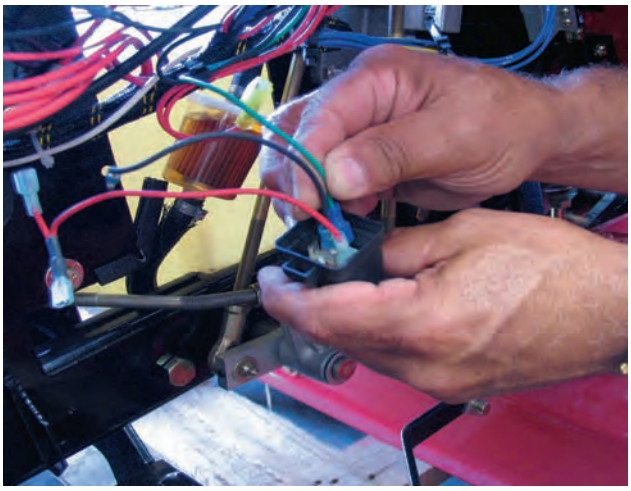


**3**

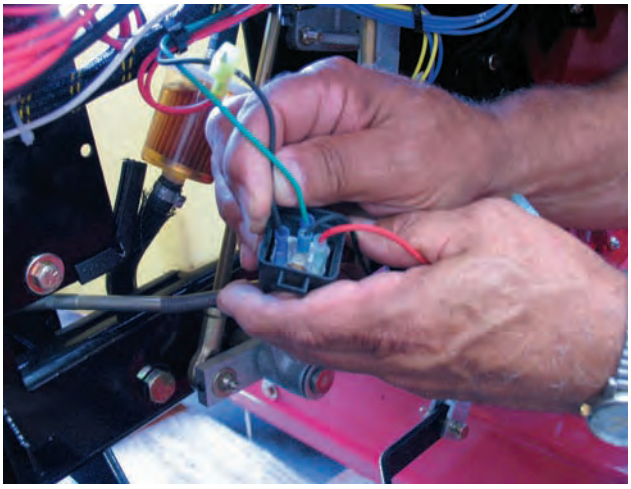
**Note the terminals inside the relay are marked.**



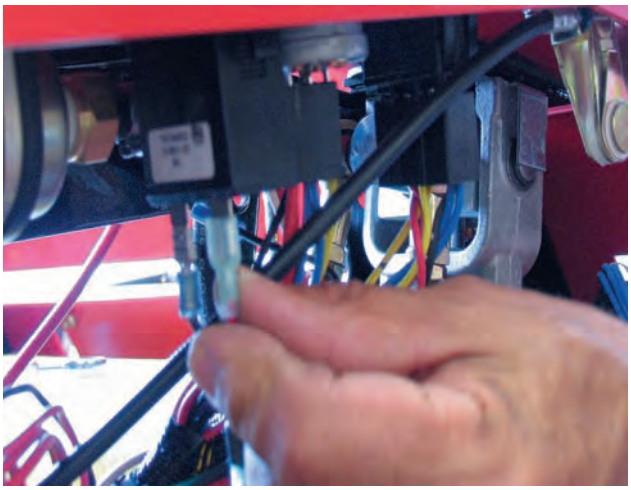

**4**



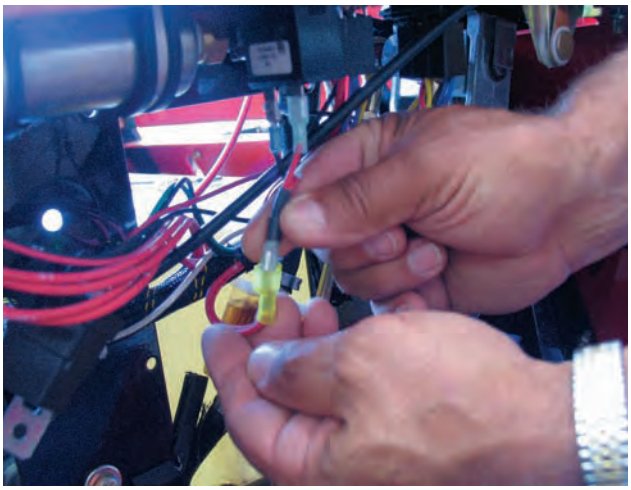
**5** **Connect the green wire from the hour meter to the 86 terminal in the relay.**



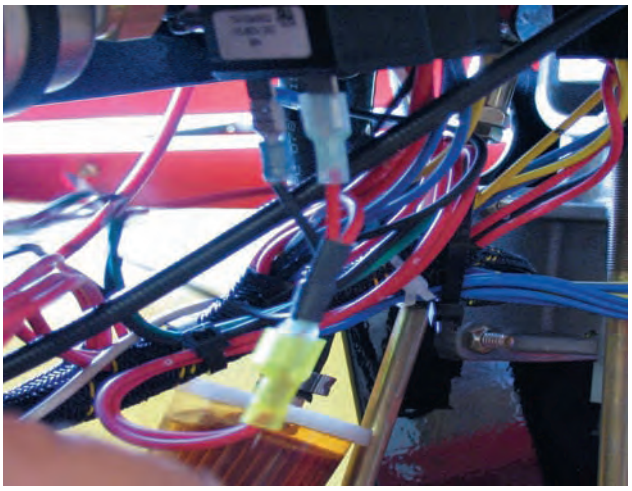
**6** **Connect the black wire from the hour meter to the 30 terminal in the relay.**



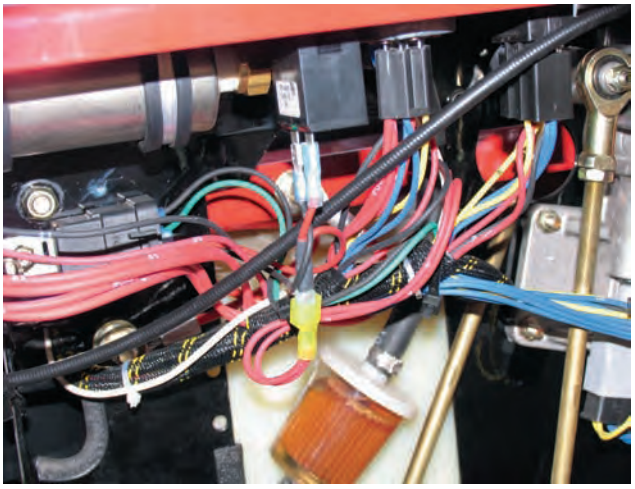
**7** **Plug the black wire from the relay to the inside (left side) terminal on the hour meter. Place one end of the short red wire from the relay to the right hand or outside terminal.**



**8** **Locate the double red wire in the tractor harness. Plug opposite end of red wire going to hour meter into the double wire.**



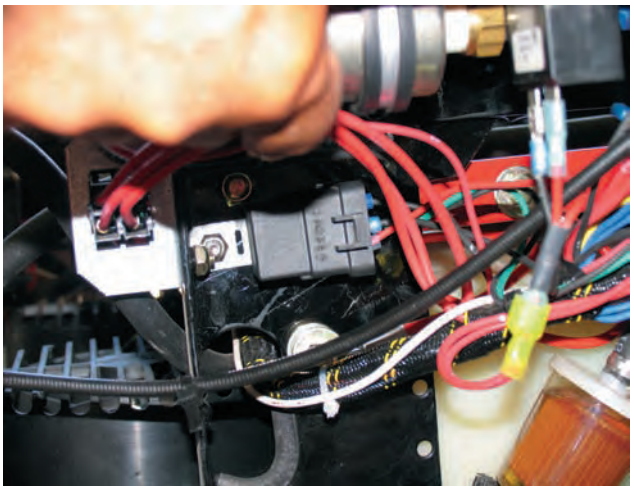
**9** Verify that a good connection is made, as the two connectors can be difficult to push together.



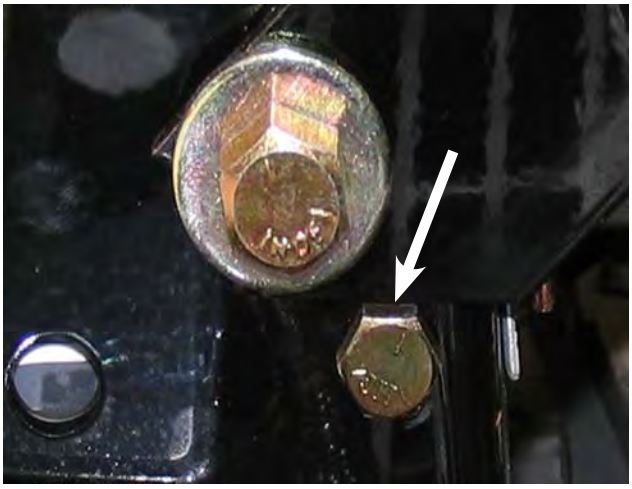
**10**

**11** Locate the 1/4” bolt used as a stop bolt for the hydro oil cooler.

**12** Remove the stop bolt.



**13** After removing **the bolt, place the relay over the bolt hole and reinstall the bolt. Secure it with a lock nut.**



**14** **Be sure to rotate the bolt so the oil cooler frame will set flat on the head of the bolt.**

**15** **Check the code light: Quickly cycle the switch on-off, on-off, and then on again. Verify it blinks 6 times, pauses, then blinks a 7th time.**

COUNTRY CLIPPER®

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# Country Clipper Update Manual
# Kit # 629EE-001A

# Clutch Electrical Spikes

**Addresses protection against electrical spiking of the clutch on The Boss mowers with 28 hp Kohler EFI engines**

P-12486

# Service Bulletin 092608

Products affected:

Boss SR1205 mowers equipped with 28 hp Kohler EFI engines

## Clutch Spike Kit (629EE-001A)

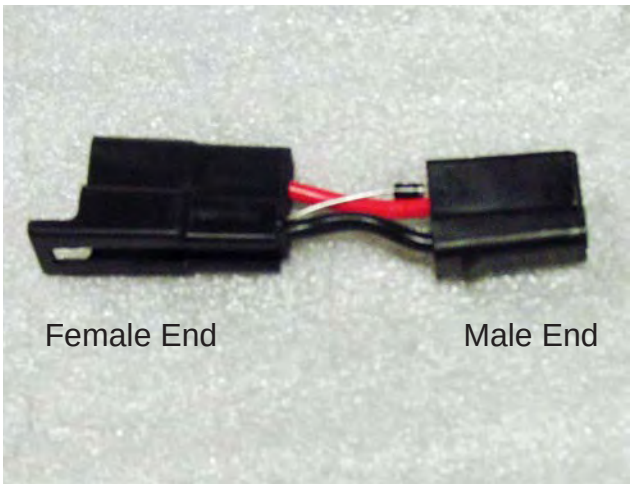
Particular Boss SR1205 mowers with 28 hp Kohler EFI engines have no spike protection for the clutch. A potential exists when shutting off the blade clutch that an electrical spike could destroy the EFI engine's computer. To reduce this potential, Country Clipper developed Clutch Spike Kit part **#629EE-001A** that must be inserted into the clutch wire connection. Affected Boss mowers are those with serial numbers **including and prior to** the following:

| Boss Model | Serial Number |
|---|---|
| 2852KOJ8-SR1205 | 647BA1 |
| 2860KOJ8-SR1205 | 647BD26 |
| 2872KOJ8-SR1205 | 647BG12 |
| 2860KOT8-SR1205 | 647BM14 |
| 2852KOT8-SR1205 | 647BN3 |
| 2872KOT8-SR1205 | 647BO10 |

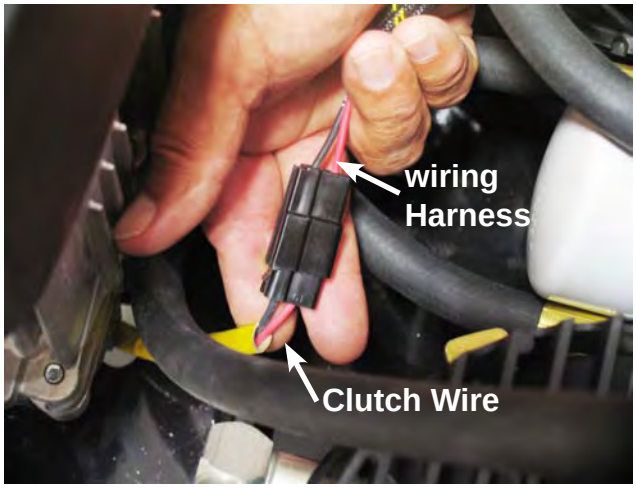
Kits are now available from the factory. **All** mowers prior to and including the above serial numbers need a Clutch Spike Kit installed to prevent potential computer failure.

**For more information, please contact your distributor's Service Manager.**

**Country Clipper Mowers**
**Corydon, Iowa 50060**
**(800) 344-8237**
**www.countryclipper.com**



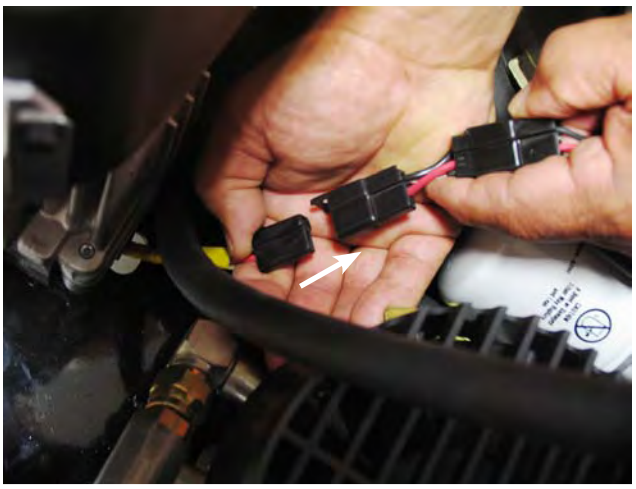

**1** Spike Kit #629EE-001A includes this harness/diode for insertion at the clutch wire connection to the wiring harness.



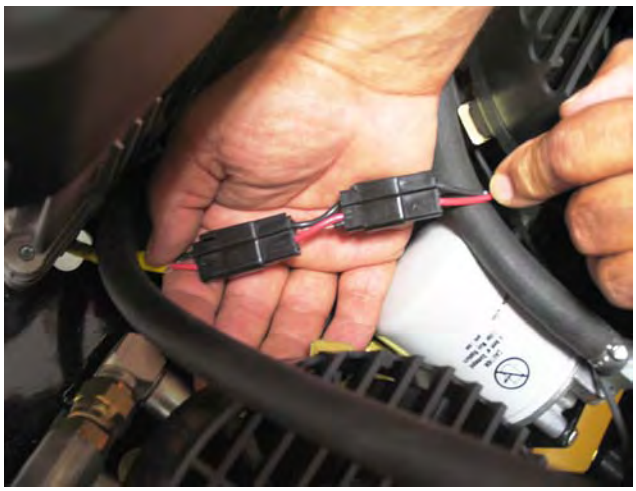

**2** Locate the connection between the **clutch wire** and **wiring harness** (near the hydro oil filter).

**3** Disconnect the **clutch wire** from the **wiring harness**.

**4** Fit the harness/diode male end into the wiring harness female end.



**5** Fit the clutch wire male end into the harness/diode female end.



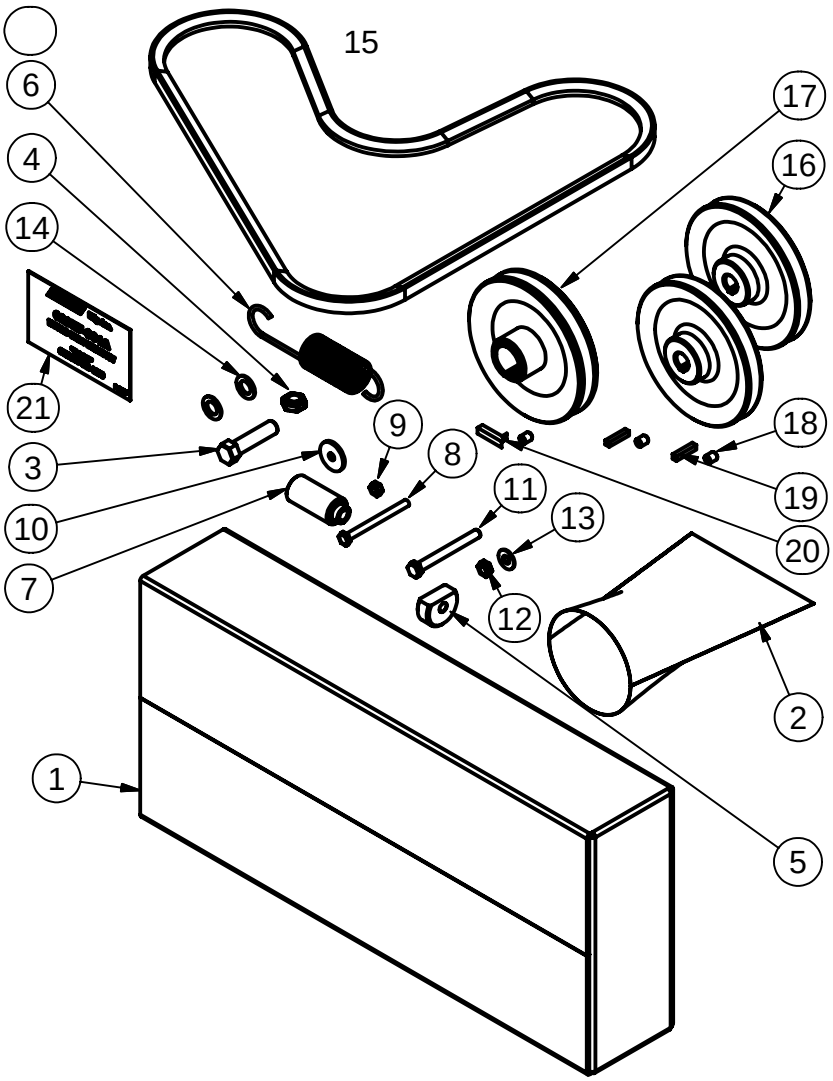
**6** Verify that both new connections have snapped together firmly.

# Country Clipper Update Manual

# Kit # 629EF-001A

## Addresses the Hydro Drive Belt for Boss SR1200 Mowers

P-12490
11/08




| Item | Qty | Part No. | Description |
|---|---|---|---|
| 1 | 1 | B-2265 | BOX, CARDBOARD 4" X 10" X 22" |
| 2 | 1 | B-2030 | 6 X 8 SACK |
| 3 | 1 | F-1293 | 1/2-13 x 2" Capscrew |
| 4 | 1 | F-1966 | 1/2-13 THIN NYLOC NUT |
| 5 | 1 | 629-668P | SPACER,IDLER,1200 KIT |
| 6 | 1 | 629-670P | SPRING, IDLER,1200 KIT |
| 7 | 1 | 629-669P | STAND-OFF,SPRING MOUNT |
| 8 | 1 | F-1765 | 1/4-20 x 3" Capscrew |
| 9 | 1 | F-1158 | 1/4-20 Stover Nut |
| 10 | 1 | 620-050P | Washer |
| 11 | 1 | F-1544 | 5/16-18 x 3" Capscrew |
| 12 | 1 | F-1125 | 5/16-18 Stover Nut |
| 13 | 1 | F-1009-02 | 5/16" Flat Washer |
| 14 | 2 | F-1521 | 1/2" Washer |
| 15 | 1 | D-3799 | V-Belt A-57 |
| 16 | 2 | 647-147P | 5-1/2" Hydro Pulley |
| 17 | 1 | 647-148P | Motor Pulley |
| 18 | 3 | F-1228 | 1/4-20 x 1/4" Set Screw |
| 19 | 2 | D-3541 | 5 MM X 20 MM KEY |
| 20 | 1 | 621-113P | 1/4"sq x 1-1/4" Key |
| 21 | 1 | P-12489 | CARTON TAG,HYDRO BELT DRIVE KIT |

**2**

See parts list for Kit # 629EF-001A on previous page.

**3**

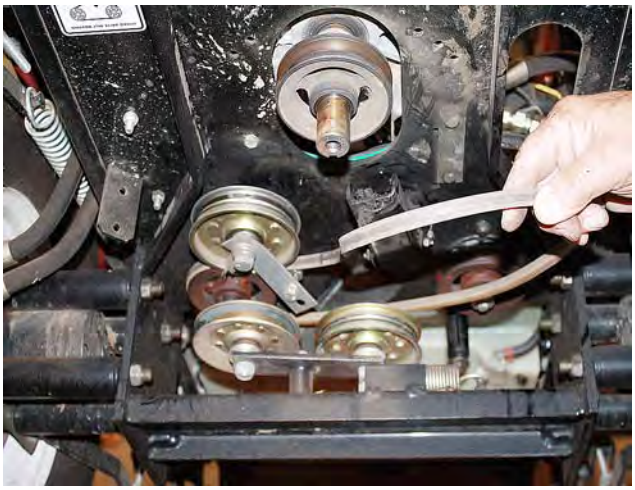
Remove the engine-to-deck belt and set it aside.

**4**

Remove the clutch.

**5**

Cut the wire ties that hold the clutch wires. Then, unplug the clutch wires from the wire harness; set the clutch aside.

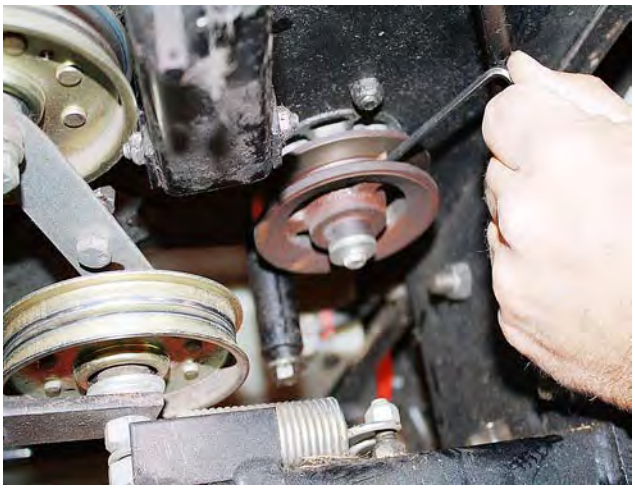


**6**

Remove the hydro belt.

**7**

Remove the engine pulley and key. Note the four washers that only Kawasaki uses.



**8**

Loosen the set screws on the hydro pulleys.

**9**

Remove the locator bolts from the pump shaft.

**10**

Remove the hydro pulleys.

**11**

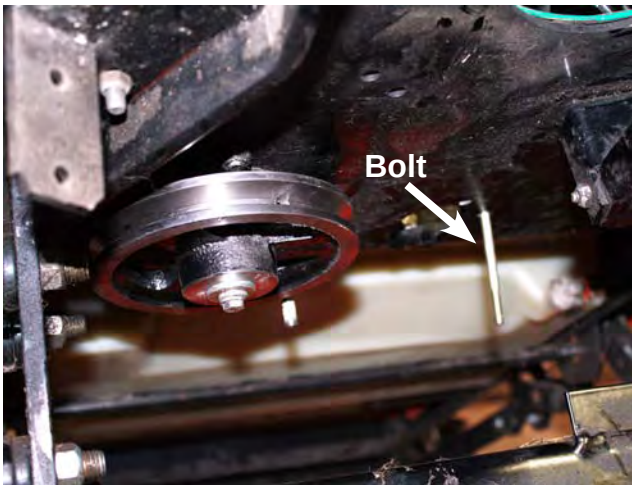
Remove the hydro idler.

**12**

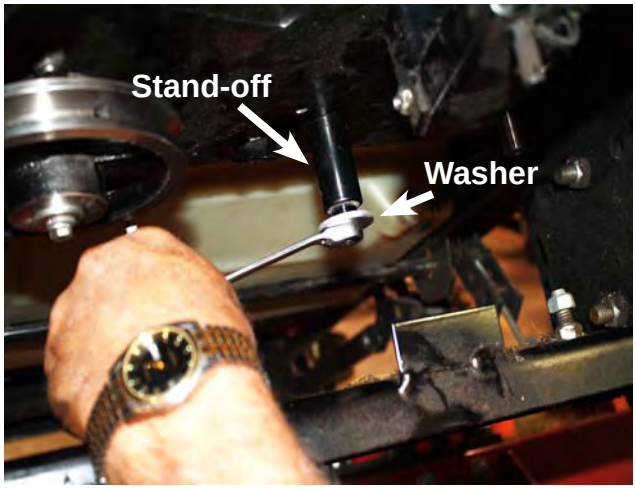
Remove the hydro idler spring anchor.

**13**

Remove the hydro oil drain chute.




**14** Place the 1/4 x 3” bolt downward through the frame; slide the **spring mount stand-off** onto the bolt. (Also, see image 28.)




**15** Place the **spring mount stand-off** onto the bolt using washer part # 620-050P; tighten.

**16** Place the F-1228 set screws into the new engine pulley and also into both 5.5” hydro pulleys.

**17** Place the D-3541 key into the hydro shaft key way.

**18** Slide the 5.5” hydro pulley onto the pump shaft. Make sure the key is secure.

**19** Place the locator bolt and washer into the end of the pump shaft and tighten.

**20** Pull the pulley downward against the locator washer; tighten the set screw. Verify the key is secure and catches the set screw.

**21** If necessary, replace the four spacer washers onto the engine crank shaft.

**22** Place the 1/4” sq x 1-1/4” square key into the engine crank shaft under the spacer washers.

**23** Place the engine pulley onto the crank shaft with the pulley’s longer hub facing upward as shown.

**Next step: Disassemble the hydro idler and reassemble it using the new instructions. Use the old arm and pulley in the reassembly.**

**24** Place F-1521 1/2” washer and F-1293 1/2-13 x 2” capscrew onto 4” pulley. Place through the pulley side that has no bushing.

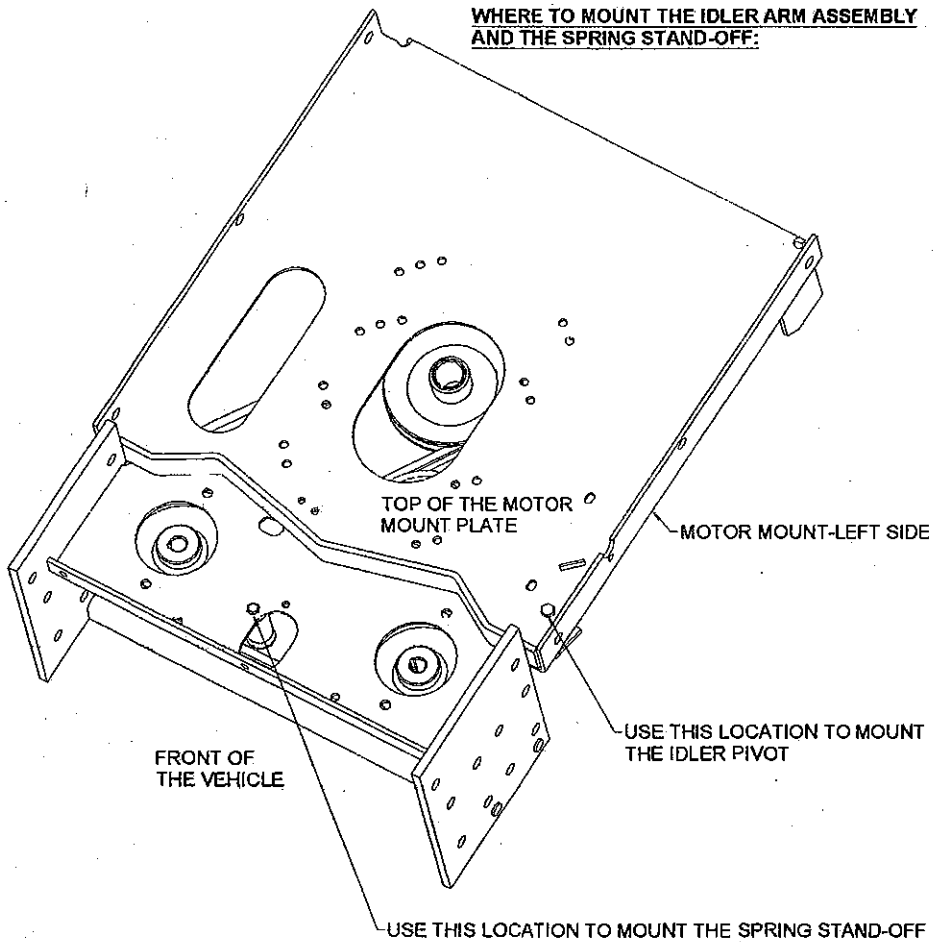
**25** Use another F-1521 1/2” washer on the bushing side of the pulley.

**26** Screw bolt into threaded hole of idler arm. Verify the pulley is on same side of the arm as the pivot bushing.

**27** Screw an F-1966 1/2-13 thin nyloc nut onto end of bolt. Verify approx. 3 threads emerge through the nut.

**Next Step:**

**Locate the new mounting hole for the hydro idler as shown below.**


WHERE TO MOUNT THE IDLER ARM ASSEMBLY AND THE SPRING STAND-OFF:
TOP OF THE MOTOR MOUNT PLATE
MOTOR MOUNT-LEFT SIDE
USE THIS LOCATION TO MOUNT THE IDLER PIVOT
FRONT OF THE VEHICLE
USE THIS LOCATION TO MOUNT THE SPRING STAND-OFF

Place the 1/4 x 3" bolt downward through this hole, then slide the spring stand-off (parts list item # 7) onto the bolt as shown in images 14 & 15.



Check belt alignment and clearances to verify the assembly and re-install the electric clutch.

**29** Using the new F-1544 5/16-18x3 cap-screw and 629-668P spacer, mount the idler arm as shown. Note the new D-3799 bolt.

**30** Reinstall the clutch; torque to 55 ft. lbs. Important: Tie the clutch wire back along the clutch stop to keep it out of the way.

**31** Replace the engine-to-deck belt.

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# Country Clipper

# Spindle
# Replacement Instructions
# for

# “Out of Warranty Spindles”

1 Remove spindle from the mower deck and clean it.

2 Remove the blade spacer.

3 Remove the thrust washer as it falls free.

4 Use snap ring pliers to remove snap ring from bottom of the spindle.

4-B

5 Remove the seal washer.

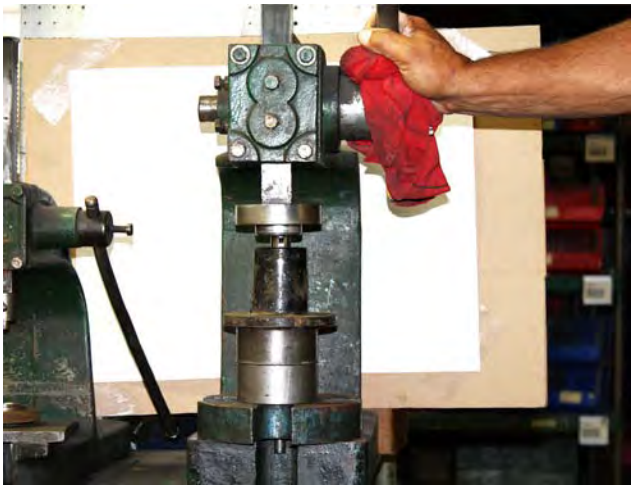
6 Remove woodruff key from bottom blade side of the spindle shaft.

6-B

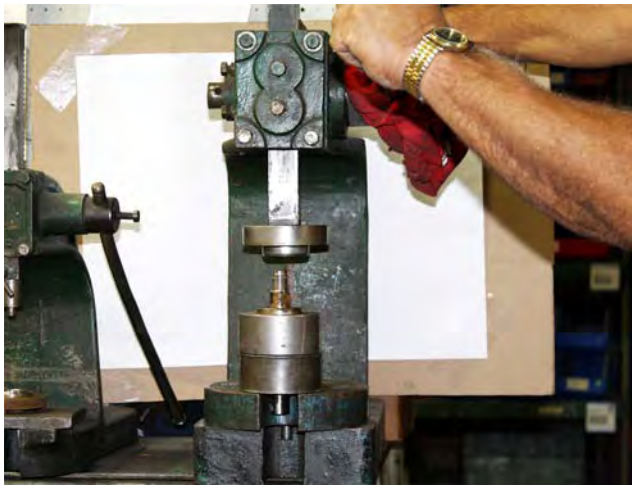
7 Remove woodruff key from top end (pulley end) of the spindle shaft.

7-B

8 Remove the grease zert.



9 Using a press, remove the shaft from the housing. This leaves one bearing on the shaft and one in the housing.



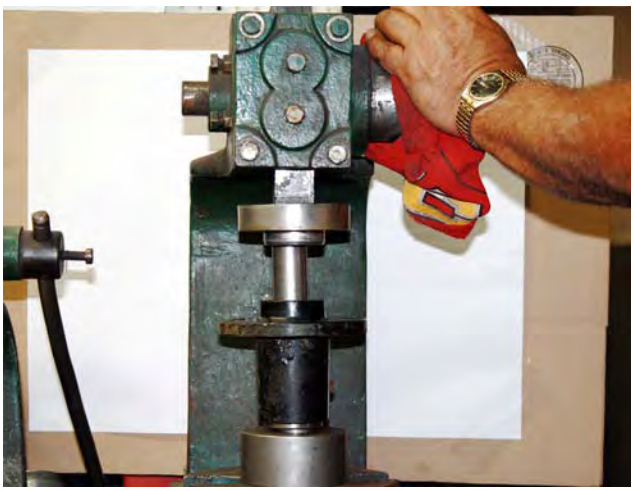
10 Remove the bearing from the shaft.

11 Inspect the spindle shaft for wear or damage.

12 Press old bearing out of the spindle housing. Inspect the housing for wear or other damage.

13 Get two new D-3058 bearings.

14 Place a bearing at each end of the shaft; then push the shaft through the housing.



15 Place spindle in the press. Press both bearings into the housing at the same time.

16 Verify that lower bearing (blade side) is completely installed in housing. If not, the snap ring will not fit into the groove.

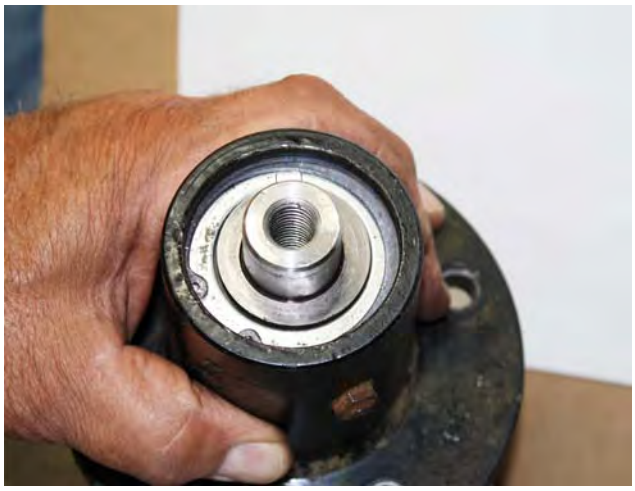
17 Position the seal washer into the blade side of the spindle.

18 Replace the snap ring.

18-B

19 Replace woodruff key into blade end of spindle. Support the shaft to keep side pressure off the bearing.

20 Reinstall the thrust washer.



20-B

21 Reinstall the blade spacer. It should position without much pressure.

22 Replace the woodruff key on pulley side of the spindle.

23 Replace the grease zert. Reinstall the spindle onto the mower to **complete the repair**.

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# Country Clipper Update Manual

## Flow Meter

## Using a Flow Meter to test hydraulic pressure of hydrostatic pumps

**P Series Flow Test Kit, Hydro-Gear part no. 70661**

A flow test kit allows dealers to isolate a pump from a wheel motor to determine if the pump is faulty. The kit can simulate a wheel motor load.

# P SERIES FLOW TEST KIT INSTRUCTIONS

BLN-51334 May 2006

**(This Instruction Sheet supersedes all previous flow testing instructions)**

## Description: P Series Flow Test Kit (Part Number 70661)

**(Part Number 70661 Supersedes Part Numbers 70511 and BB-76810)**

**Purpose:** The design purpose of the P Series Flow Test Kit is to allow the customer to isolate the pump from the wheel motor and determine if the pump is acceptable. The following information can be used to install and test the pump by simulating a wheel motor load.

### WARNING

**Certain procedures require the vehicle engine to be operated and the vehicle to be raised off of the ground. To prevent possible injury to the servicing technician and/or bystanders, insure the vehicle is properly secured.**

### WARNING

**Do not attempt any adjustments with the engine running. Use extreme caution while working in or around all vehicle linkage! High temperatures can be generated. Follow all safety procedures outlined in the vehicle owner's manual!**

## INSTALLATION AND TESTING PROCEDURES:

**1.** Disconnect the system hoses at the wheel motor, or system hoses from the pump and connect the P Series Flow Test Kit. (Special care should be taken to prevent contamination debris from entering pump or wheel motor system ports).

**Note:** Using the Bi-Directional Flow Test Kit, determination of directional flow is not necessary. The flow meter may be connected in either direction into the forward and reverse high pressure system lines.

**CAUTION: Ensure all fittings and hoses are attached securely. This test is being completed on the vehicle's high pressure system lines. Failure to perform this properly could result in bodily injury.**

**TESTING PROCEDURES:**

**1.** Raise the drive tires off the ground. Block the remaining tires on the ground to prevent accidental vehicle movement.

**2.** Open the restriction valve all the way.

**3.** Make certain all external pump directional control stops are removed or backed off on the vehicle linkage to obtain full pump directional control arm travel.

**4.** Start the engine and engage the drive pulley if necessary.

**5.** Bring the engine to maximum operating speed.
**(This should not exceed 3600 rpm input speed on the PC, PL, PG, and PJ Series Pumps)**
**(This should not exceed 3400 rpm input speed on the PR)**
**(This should not exceed 2600 rpm input speed when testing the PW)**
**Engine speed adjustment may be necessary to obtain 2600 rpm.**

**CAUTION: Damage to the flow meter and/or re-calibration may result from testing at input speeds that exceed 2600 rpm on the PW and 3400 rpm on the PR Pumps.**

**6.** With the directional control lever (on the vehicle) for the pump being tested, move the control arm in full forward motion. (It may be necessary to lock the control arm into full forward position to prevent false readings).

**7.** Operate without any load for approximately 30 seconds to 1 minute. This allows the system oil temperature to rise.

**Note:** Raising the system oil temperature will make a difference in the readings you receive. It has been determined that to complete this test accurately, the oil temperature must be near system operating temperatures. Suggested temperature range 160°- 210°F (71.1° - 98.9°C)

**8.** On the PC, PG, PJ, PL, PR and PW, tighten the flow meter restriction valve until the gauge reads 300 psi (21bar). Record the flow reading on the Bi-Directional Flow Meter.

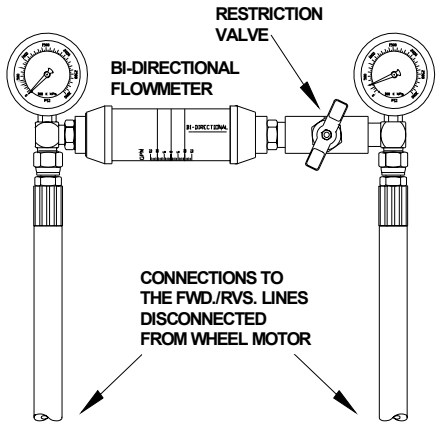
**9.** Increase the pressure to 1100 PSI (76 bar) for all models (PC, PG, PJ, PL, PR and PW). Record the flow reading on the Bi-Directional Flow Meter.

**10.** The **acceptable gpm "flow droop" or (difference)** is:

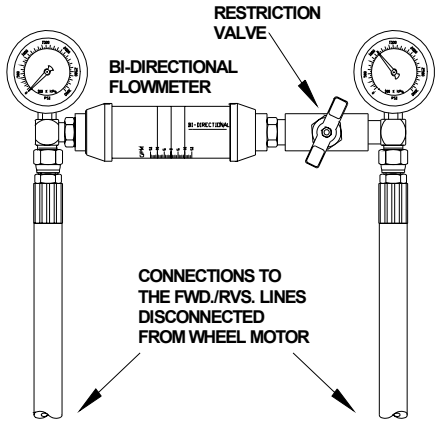
| | |
|---|---|
| **PC** | **1.0 gpm (3.7 l/min)** |
| **PG/PL** | **1.5 gpm (5.6 l/min)** |
| **PJ** | **2.0 gpm (7.6 l/min)** |
| **PR** | **2.5 gpm (9.4 l/min)** |
| **PW** | **2.5 gpm (9.4 l/min)** |

If the difference exceeds these values the pump would not be operating efficiently and should be replaced.

## TEST EXAMPLE: PG/PL




**300 psi (21 bar) reading** **7 gpm (26 l/min) (1st reading)**




**1100 psi (76 bar) reading** **3 gpm (11 l/min) (2nd reading)**

**(PG/PL)**

**300 psi (21 bar) reading** **7 gpm (26 l/min) (1st reading)**

**1100 psi (76 bar) reading** **– 3 gpm (11 l/min) (2nd reading)**

**4 gpm (15 l/min) (the difference)**

**Subtract the 1st reading from the 2nd. (In this example, 4 gpm difference would indicate further pump examination).**

**1**

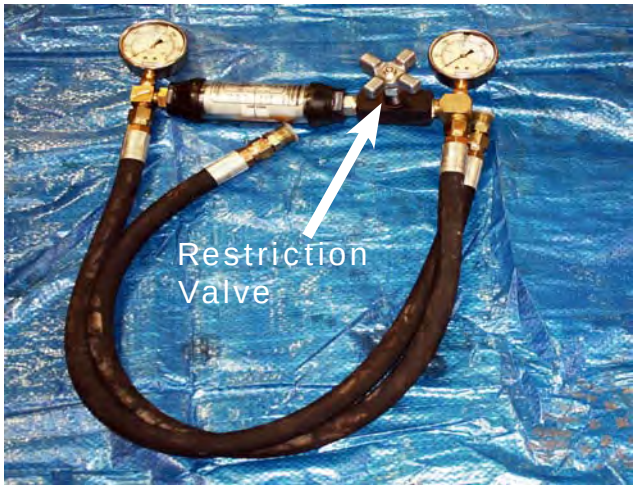
Jack the mower up.

**2**

Place jack stands under the mower frame.

**3**

Verify the oil filter is part # H-2026 and that it is not plugged.



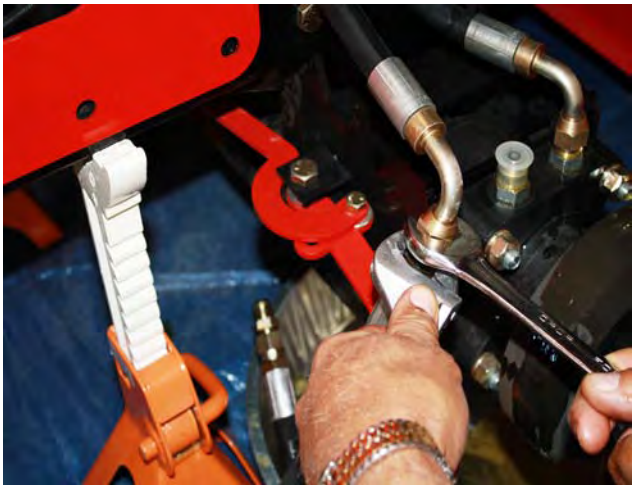

**4**

Test oil flow in the pump using a flow meter. (Note: **Restriction Valve**)

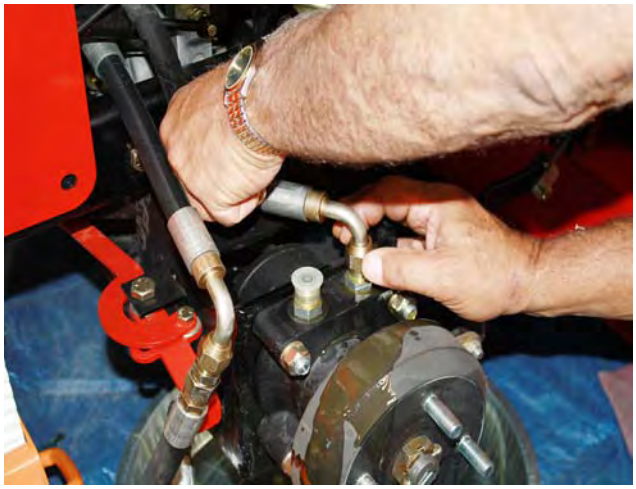
**5**

Remove the wheel.

**6** Remove the **return** line from the wheel motor.



**7** Connect the pump's return line with either line from the flow meter. Matching lines is not important here.



**8** Disconnect the **input** line from the wheel motor, which is positioned to the front.

**9** Fasten the input line to the remaining flow meter line.

**10** Relocate plastic caps from the flow meter lines to the wheel motor fittings. These protect against debris.

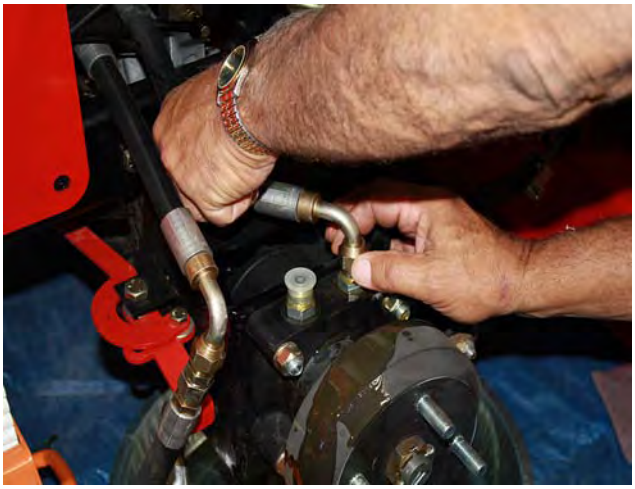
**11** Start engine and reach full speed so hose becomes hot to touch. Adjust Restriction Valve (not shown) to 300 lbs gauge pressure.

**12** While this pump reads 10.5 gal/min, good pumps may read 6-10 gal/min at 300 lbs pressure.

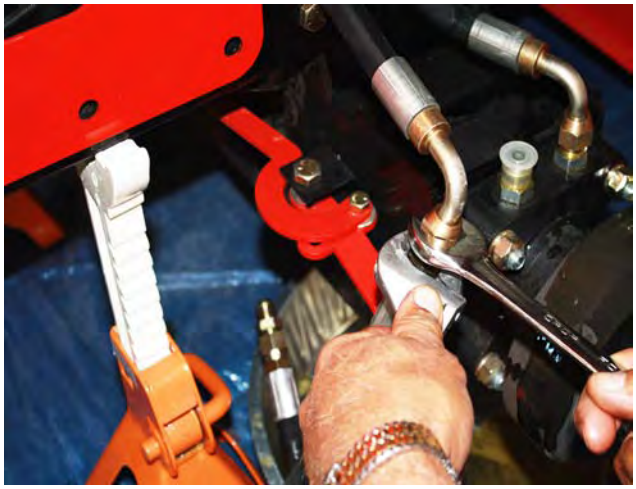
**13** Next, move Restriction Valve again to raise pressure to 1100 lbs.

**14** View the flow rate gauge again. In this case, the drop is less than 1/2 gal/min, a good pump. (See instruct.)

**15** To end the test, turn off engine and disconnect the flow meter. Remove the input hose from the flow meter.

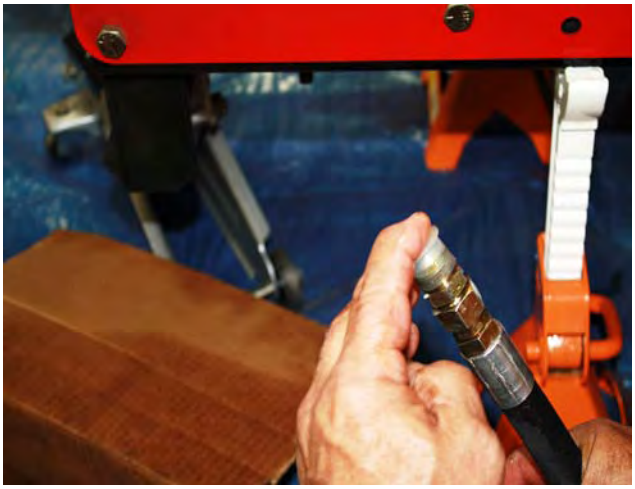


**16** Reconnect the input hose to front fitting of the wheel motor. Torque to 35 ft. lbs.



**17** Remove the return line from the flow meter.

**18** Reconnect the return hose to rear fitting of the wheel motor. Torque to 35 ft. lbs.



**19** Relocate the plastic covers back onto the flow meter lines. These protect against debris.

**20** Replace the wheel back onto the mower.

**21** Country Clipper uses a torque **stick** set to 75 lbs.

**22** Tighten lug nuts and torque to 75 ft. lbs.

## Note:

It will not be necessary to bleed the hydraulic lines after the testing procedure.

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# Country Clipper Update Manual

## Hydro & Deck Belt Alignment

## Idler Arms, Spindle Pulleys, and Belts

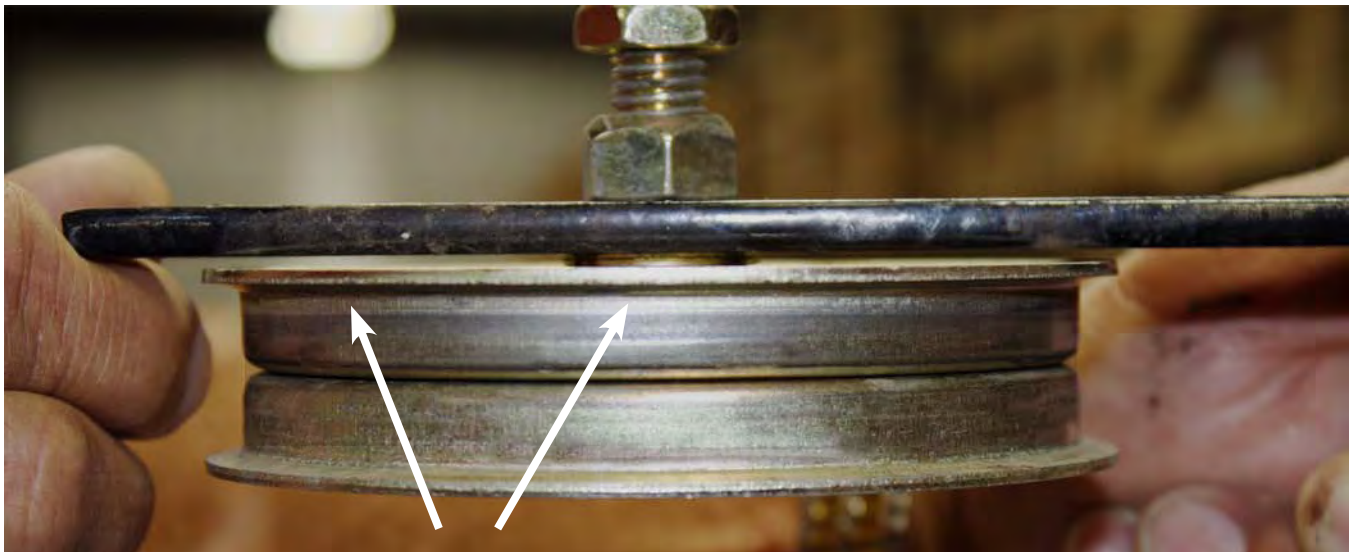
# Hydro Belts

## Spindle Pulleys (Deck)

Proper pulley alignment is essential for proper belt travel and is key to belt life. Pulleys also must be free of obstructions, as even small deviations in an otherwise smooth pulley face can cause the belt to break or fly off a pulley.

**1** Check to verify that belt pulleys are aligned to one another.

The action of a belt will leave a shiny path along where it travels on a pulley. Verify the belt travels well away from both edges (lips) of the pulley. If the belt travels too close to a pulley lip, eventually it will break or fly off.



Shinier, worn area indicates the belt is traveling off-center, too close to the pulley lip.

## Idler Arm

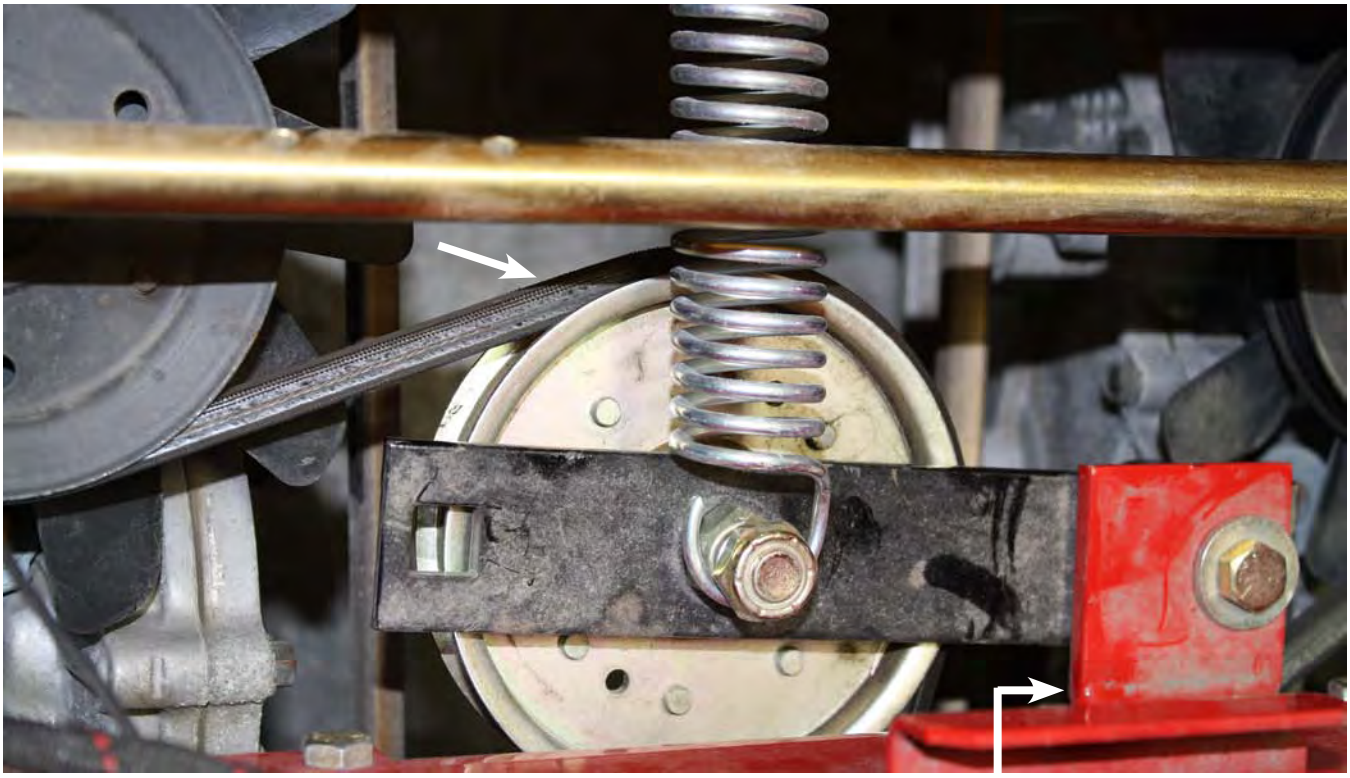
**2** Check the idler arm's bushings to see if they are worn. More current idler arms have Teflon bushings with better wear qualities.

Older idler arms use a smaller bushing more susceptible to side pressure and wear. As the bushing wears, belt tension pushes the arm upward to mis-align the pulley.

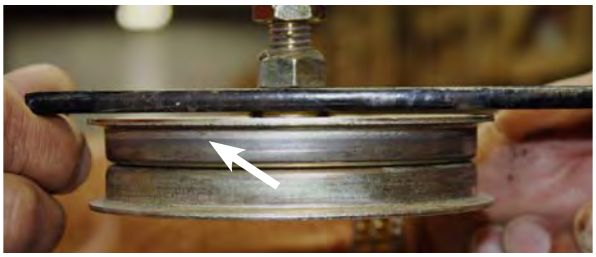
The bushing on newer idler arms is much heavier and wears longer to keep the belt properly aligned.

If the idler arm fastens to a tab, such as on JAZEE and JAZEE PRO models, verify the tab is not bent or angled in any way. If a belt travels at a slightly angled path across the face of a flat idler pulley, the belt will migrate to the pulley's lip and eventually fly off or break. If a pulley is slightly angled, its belt will migrate in the same direction.

The example below shows a bent motor mount tab. This has caused the idler arm and its pulley to operate on an uneven plane. In this illustration, the belt rides too “high” toward the pulley’s upper lip. A belt will migrate on a pulley in the direction of any misalignment. If the tab is not readjusted back to level, this belt eventually will fray along its top edge and break or fly off.

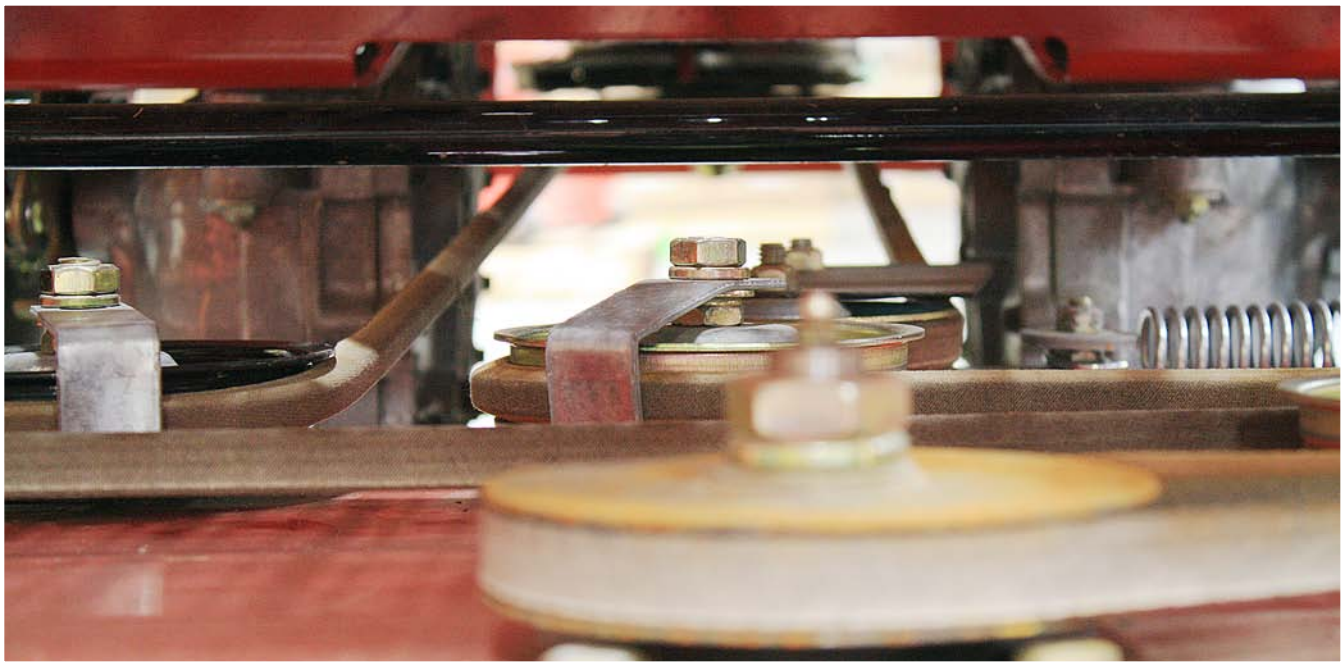


Motor mount tab is bent upward



## Deck Belts

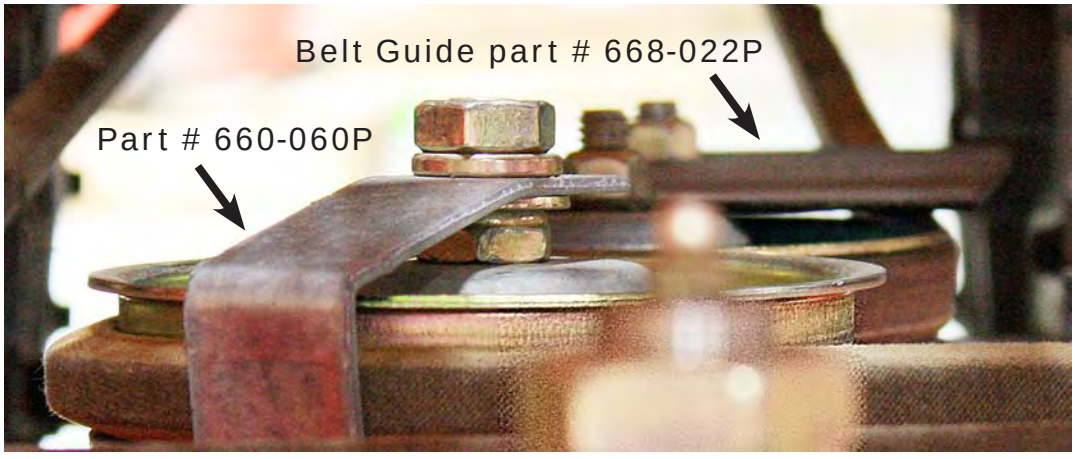
While spindle pulleys are aligned on a level plane with one another, the plane on which clutch/idler pulleys operate changes as the belt moves toward the deck from the rear of the mower. The plane changes as the deck is raised or lowered.



As the deck height has been lowered, the belt also becomes lower as it moves from the clutch area into the double idler.

Change in level is controlled with a double idler (pulleys) and belt guides. From the clutch, the belt moves forward entering the left side double idler's V-pulley. Belt guide part # 668-022P fixed atop the pulley helps this process.

The belt then moves into the double idler's second pulley (flat pulley). Belt guide part # 660-060P is used to reduce the belt's potential to come off the flat pulley. This guide must be set so that it cannot be pulled into the belt if the double idler flexes. Upon leaving the double idler, the belt now should be on the same level plane as the spindle pulleys.



If a belt does not travel properly while moving throughout the series of spindle pulleys, any of the deck pulleys may have become misaligned or the belt is rubbing against an obstruction such as a bolt, pulley cover, etc. In some cases, a defective pulley may be the issue.

After the belt travels around the right spindle pulley, it enters the right side idler pulley. This idler pulley is rigid and is responsible for changing the belt's plane back to the clutch. Belt guide part # 660-060P located on the top of this pulley must be set as close as possible to the belt without obstructing it.

**Issues causing belt failure:**

- Bent idler arm
- Worn idler arm bearing or bent, twisted motor mount tab
- Pulley that is misaligned, tilted, or has sharp or blunt obstructions
- Improper positioning of belt guide
- Defective belt
- Belt age and hours of usage

##

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# Country Clipper Update Manual

## Interstate Batteries

### Maintenance & Charging

# Battery Maintenance

**All batteries, when not in use, will need to be charged at some point in time. Below is information to help keep your batteries performing at their peak.**

- The smaller the battery, the quicker it discharges.
- Warmer temperatures accelerate the discharge process.
- A voltmeter is the best way to determine if a battery needs charging.
- If a voltmeter is not available, a battery should be recharged every six months.
- The following chart helps in knowing a battery's state of charge:

| Voltage | State of Charge |
|---|---|
| 12.6 volts | 100% |
| 12.4 volts | 75% |
| 12.2 volts | 50% |
| 12.0 volts | 25% |
| 11.8 volts | 0% |

- Every battery should be charged on arrival.
- Charge at 2.4 amps for 4 - 6 hours.
- When battery becomes warm, turn charger down.

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# Country Clipper Update Manual

## Peco Grass Collection Systems

### Warranty Procedures & Pricing

# COUNTRY CLIPPER WARRANTY PROCEDURES FOR PECO GRASS COLLECTION SYSTEMS

8/1/08

In an effort to process warranty claims for Country Clipper grass collection systems manufactured by PECO in a timely manner, Country Clipper has implemented the following procedures for all PECO warranty claims:

1. The Country Clipper servicing dealer must submit all warranty claims directly to their distributor using the standard Country Clipper warranty claim form. All claims must be reviewed and signed by the distributor's designated service personnel. The distributor will then forward the claim to PECO within 30 days of the repair date on the warranty claim.
2. All replacement parts for warranty repair work will need to be ordered from the dealer's respective Country Clipper distributor.
3. All warranty claims must include the following information before processing can be completed:
    a. The serial# of the collection system.
    b. The date of purchase.
    c. The date of failure.
    d. The date of repair.
    e. The name and contact information of the dealer performing the warranty work, including a phone#.
4. The claim must describe as thoroughly as possible the nature of the failure and the repair work that was performed. **All claims that do not include the information in #3 and #4 may be returned to the distributor for clarification.**
5. The dealer must indicate on the warranty claim the amount of labor that was necessary to perform the warranty repair work. Labor will be paid at $45^{00}$ per hour. Labor times will be reviewed and approved or adjusted by PECO.
6. PECO will issue a return authorization and a UPS call tag for the return of all failed or damaged parts. Returned parts must be received by PECO with a copy of the return authorization before the claim can be processed. Upon receiving the returned part, PECO will call the dealer and make a determination as to whether it was a PECO defect or if the damage was caused by misuse.
7. PECO's warranty does not cover pick-up and delivery of warranted units.
8. All warranty claims will be paid to the distributor and then forwarded to the servicing dealer for reimbursement.

The following is a PECO recommended stocking list for Country Clipper Distributors:

**Easy Dump Collection System (EDBS)**

| Part# | Qty | Description | Retail Price |
|---|---|---|---|
| A0645 | 8 | Small 4-Blade Impeller | $ 225.00 |
| A0046 | 5 | ¾" Tapered Bushing for A0645 | $ 37.90 |
| A0709 | 5 | Boot Kit | $ 252.00 |
| A0738 | 1 | Door Frame Assembly | $ 170.00 |
| E4004A | 5 | Blower Housing Assembly | $ 378.00 |
| E6009 | 5 | Blower Cone 8" | $ 53.50 |
| K1442 | 1 | Super Latch Adjusting Ball Joint | $ 5.26 |
| M0243 | 5 | Belt, Kevlar A49K | $ 9.67 |
| M0250 | 5 | Belt, Kevlar A30K | $ 11.50 |

**3 Bagger Collection System (PBS)**

| Part# | Qty | Description | Retail Price |
|---|---|---|---|
| G0002 | 12 | Collection Bag 3.3 Cu. Ft | $ 63.16 |
| J4005 | 1 | Flexible Draw Latch | $ 7.37 |
| E4004B | 2 | Blower Housing Back | $ 193.00 |
| E4004F | 2 | Blower Housing Front | $ 193.00 |
| M0243 | 5 | Belt, Kevlar, A49K | $ 9.67 |
| M0250 | 5 | Belt, Kevlar, A30K | $ 11.50 |
| V1054 | 5 | Inlet 6" | $ 90.50 |
| E1902 | 5 | Welded Boot | $ 202.11 |
| 2 to 3 lengths | | Hose 8" X 218" | $ 1.58/In. |
| J6006 | 15 | Hose Clamps 7 & 8" | $ 7.37 |

**2 Bagger Collection System (JZBS)**

| Part# | Qty | Description | Retail Price |
|---|---|---|---|
| G0004 | 10 | Collection Bag 2.9 Cu. FT. | $ 63.16 |
| M0268 | 10 | Belt, Kevlar, A47K | $ 10.50 |
| M0267 | 10 | Belt, Kevlar, A28K | $ 11.29 |
| V1160 | 10 | Boot, Plastic w/holes | $ 77.90 |
| V1162 | 10 | Boot, Plastic, holes | $ 77.90 |
| V0016 | 10 | Blower Cone 6" | $ 29.47 |
| 2 to 3 lengths | | Hose 6" X 218" | $ 1.26/In. |
| J6011 | 15 | Hose Clamps 6" | $ 7.37 |
| V0015 | 10 | Blower Housing | $ 71.58 |
| V0017 | 10 | Catcher Top | $ 107.34 |
| V0019 | 10 | Inlet | $ 28.95 |
| J4009 | 10 | Rubber Strap w/Hook | $ 7.37 |

Parts will need to be ordered by the distributor direct from PECO. Country Clipper will not stock replacement PECO parts for distribution.

First With Innovations That Last

# Country Clipper Update Manual

## Recall

## Jack Tools & Kits

# Recall Alert

## U.S. Consumer Product Safety Commission

Office of Information and Public Affairs Washington, D.C. 20207

September 24, 2008
**Alert #08-DRAFT**

## Shivvers Manufacturing Recalls Lawn Mower Jacks Due to Collapse Hazard

***The following product safety recall was voluntarily conducted by the firm in cooperation with the CPSC. Consumers should stop using the product immediately unless otherwise instructed.***

**Name of Product**: Jack Lift Tools and Kits
**Units:** About 450
**Manufacturer:** Shivvers Manufacturing Inc., of Corydon, Iowa
**Distributor:** Country Clipper, a division of Shivvers Manufacturing Inc. of Corydon, Iowa
**Hazard:** The jack lifts can have threads stripping or the nuts breaking, resulting in the shaft slipping and the mower falling from its stand-up position. This could cause serious personal injury to the consumer or property damage.
**Incidents/Injuries:** Shivvers has received five reports of jack lift failures and 37 warranty claims for replacement parts.
**Description:** The recalled jacks are used for lifting the lawn mower during service or maintenance. Two versions of this jack model have been manufactured. Version number one was made with a nylon nut and version number two was made with a sintered bronze nut. These recalled jacks were sold separately and on Charger, JAZee and Boss riding lawn mowers.
**Sold by:** Country Clipper dealers nationwide from May 2007 through June 2008 for about $150 for the jack, and about $225 for the jack kits.
**Manufactured in:** United States
**Remedy:** Consumers should immediately stop using the jacks and contact their local service dealer to have their lawn mowers repaired at no charge.
**Consumer Contact:** For additional information, contact your local dealer or Country Clipper at (800) 344-8237 between 8 a.m. and 4:30 p.m. CST Monday through Friday or visit the firm's Web site at www.countryclipper.com.

August 13, 2008

IMPORTANT CONSUMER PRODUCT SAFETY RECALL

Dear Country Clipper Distributor,

This letter is regarding a safety recall of the QRS Deck Jack Lift Tool. This recall supersedes both Service Bulletins 011008 and 062008 and **all jacks and jack kits in the field as well as in distributor and dealer inventory will need to be replaced.** Replacement of these jacks will be handled through our normal warranty claim procedures. Your dealers will be provided with a special recall warranty claim form that they will submit to you for reimbursement.

Replacement jacks with a redesigned nut (part# 629-653A) will be available the week of August 18, 2008. This part# will need to be ordered for mowers that have jacks already installed on the unit. For jack kits that the distributor and dealer elect to stock for aftermarket sales, the JAZEE/BOSS Jack Kit catalogue# is JKJB, and the Charger Jack Kit catalogue# is JKCH. An updated Accessories Price List that includes these kits will follow shortly.

Our goal is the replacement of all jacks as soon as possible in the field, including those in dealer and distributor inventory. We can only do this with your assistance. Enclosed are copies of our communication with your dealers, and to the retail purchasers of any 72" Boss mower that was equipped with the affected jacks, instructing them to contact their Country Clipper dealer to have their jacks replaced. Notification of remaining owners of jacks and jack kits will be the responsibility of the dealer. Please do not notify your dealers and customers by blanket mail regarding this factory recall.

Enclosed are Return Authorizations and call tags for the return of any jacks or jack kits in your inventory. The distributor will then need to reorder kits and jacks for field replacement and for stock. Dealers will need to order replacement jacks from their respective distributor. Although it will not be necessary to reorder the same quantity of kits and jacks returned to Country Clipper, it will be necessary for the distributor to reorder as this is not an automatic one-for-one replacement program.

We appreciate your efforts, cooperation, and patience, and we are confident that as we administer this safety recall, Country Clipper products will continue to be regarded as premier products in the market place.

Best Regards,

Dennis Ervin

August 26, 2008

# IMPORTANT SAFETY RECALL

Re: QRS Deck Jacks and Kits

Dear Country Clipper Dealer,

In cooperation with the Consumer Product Safety Commission, Shivvers Manufacturing is conducting the safety recall of the QRS Deck Jack Lift Tool. You have recently been contacted regarding the replacement of the QRS Deck Jack Lift Tools and related kits as specified in Service Bulletins 01108 and 062008. A small number of these jacks, both with the nylon nut and its recent replacement with the brass nut, have experienced malfunctions. To eliminate these malfunctions, a replacement jack with a redesigned nut (part# 629-653A) and is currently available to order.

Our goal is the replacement of all jacks as soon as possible in the field, including those in your inventory. These jacks and jack kits include the new JSLTa and JSLTb kits, as well as any new 629-622A replacement jacks for 72" units, and the original JDLT-QRSCH and JDLT-QRSJZ kits, and jack part# 629-553A still remaining in the field and in your inventory. Country Clipper will also be communicating to the retail owners of any 72" Boss mower that was equipped with the affected jacks, recommending to them that they contact their Country Clipper dealer to have their jacks replaced. It will be the responsibility of the dealer to contact any remaining owners of jacks and jack kits to instruct them to have their jacks replaced and to schedule a service appointment.

**This safety recall supersedes both Service Bulletin 011008 and 062008 and all jacks and jack kits listed above will need to be replaced.** On kits installed on mowers, only the jack will need to be replaced, not other kit components. Please refer to the instructions that will accompany the new jack for installation procedures. Jack kits will be available soon after for you to stock and sell after market.

Replacement jacks will be covered by warranty and will be installed at no cost to the customer through our normal warranty claim procedures. Country Clipper will reimburse the dealer for ½ hour of labor per the dealer's posted shop labor rate to replace the jack, plus $50 for a pickup and delivery fee. **All jacks must be returned to the factory in order for the dealer to receive payment for these warranty claims.** Enclosed is a return authorization, a UPS call tag to return the recall jack, and a special warranty claim form to be submitted to your distributor for reimbursement. Please include the return authorization with any return parts. Failure to do so may result in a delay in issuing credit to you.

Your distributor will be in close contact with Country Clipper as we administer this safety recall. If you have any questions regarding this recall, please feel free to call us at 800-344-8237. We appreciate your cooperation in this matter during this very busy season.

Thank you,
John Grimes
Service Manager
Country Clipper Mowers

COUNTRY CLIPPER®

*First With Innovations That Last*

# Quick Reference Guide

# Hydro Gear

## Technical Specifications - Integrated Hydrostatic Transaxles

| Transaxle Package Model | | EZT™ ZC | ZT-2800™ ZH/ZJ | ZT-2800™ ZK/ZL | ZT-2800™ ZM |
|---|---|---|---|---|---|
| **Overall Transaxle Reduction** | | 19.2:1 | 20.69:1 | 24.74:1 | 27.23:1 |
| **Input Speeds** | | | | | |
| Maximum H-Idle [No Load] | rpm | 3000 | 3000 Non-Charged /3600 Charged | | |
| Minimum | rpm | | 1800 | | |
| **Output Torque** | | | | | |
| Intermittent | lb-ft [N-m] | 150 [203] | 300 [406] | 340 [461] | 370 [502] |
| Continuous | lb-ft [N-m] | 115 [155] | 160 [217] | 180 [244] | 200 [270] |
| **Weight on Tires (per unit)** | | | | | |
| Maximum with 18" tires | lb [kg] | 340 [154] | 400 [181] | 480 [217] | 540 [244] |
| Maximum with 20" tires | lb [kg] | — | 360 [163] | 440 [199] | 480 [217] |
| Maximum with 22" tires | lb [kg] | — | — | 400 [181] | 440 [199] |
| **Axle Shaft Diameter** | in [mm] | 1.00 [25.4] | 1.00 [25.4] | | |
| **Axle Shaft End Options** | Type: | — | Tapered | | |
| | | 4-Bolt Flange | 4-Bolt Flange | | |
| | | Two Flats | 5-Bolt Flange | | |
| **Parking Brake Type** | | Cog | Internal | | |
| **Weight of Unit** | lb [kg] | 29 [13] | 32 [14.5] | | |

# Kohler (Command Twin) quick reference for Country Clipper

| | 27hp | 23hp | 25hp | 20hp | 23hp | 30hp |
|---|---|---|---|---|---|---|
| | CV740-0012 | CV23-75613 | CV730-0030 | CV20-65595 | CV23-75601 | CV750-0013 |
| | | | | | | |
| Air Filter | 25 083 01-S | 45 083 02-S | 25 083 01-S | 45 083 02-S | 25 083 01-S | 25 083 01-S |
| Pre Cleaner | N/A | 45 083 01-S | N/A | 45 083 01-S | N/A | N/A |
| Inner Filter | 25 083 04-S | N/A | 25 083 04-S | N/A | 25 083 04-S | 25 083 04-S |
| Oil Filter | 12 050 01-S | 12 050 01-S | 12 050 01-S | 52 050 02-S | 12 050 01-S | 12 050 01-S |
| Dipstick | 24 038 04-S | 24 038 04-S | 24 038 04-S | 24 038 04-S | 24 038 04-S | 24 038 04-S |
| Carb Kit | 24 757 20-S | 24 757 46-S | 24 757 18-S | 24 757 18-S | 24 757 46-S | 24 757 51-S |
| Starter | 25 098 09-S | 25 098 09-S | 25 098 09-S | 25 098 09-S | 25 098 09-S | 25 098 09-S |
| Charge Coil | 54 755 09-S | 237878-S | 237878-S | 237878-S | 237878-S | 237878-S |
| Ignition Modules | 24 584 36-S | 24 584 45-S | 24 584 45-S | 24 584 45-S | 24 584 45-S | 24 584 36-S |
| Spark Plugs | RC12YC | RC12YC | RC12YC | RC12YC | RC12YC | RC12YC |
| Fuel Filter | 25 050 22-S | 24 050 22-S | 25 050 22-S | 24 050 10-S | 25 050 22-S | 24 050 10-S |
| Engine Oil | 25 357 05-S | 25 357 05-S | 25 357 05-S | 25 357 05-S | 25 357 05-S | 25 357 05-S |
| Regulator/Rectifier | 41 403 09-S | 41 403 09-S | 41 403 09-S | 41 403 09-S | 41 403 09-S | 41 403 09-S |
| Head Gaskets | 24 841 03-S | 24 841 02-S | 24 841 03-S | 24 841 01-S | 24 841 02-S | 24 841 03-S |
| Intake Gaskets | 24 041 01-S | 24 041 01-S | 24 041 01-S | 24 041 01-S | 24 041 01-S | 24 041 01-S |
| Exhaust Gaskets | 24 041 49-S | 24 041 49-S | 24 041 49-S | 24 041 49-S | 24 041 49-S | 24 041 49-S |
| Breather Hose | 24 326 54-S | 24 326 03-S | 24 326 54-S | 24 326 03-S | 24 326 54-S | 24 326 78-S |
| Top Seal | 24 032 01-S | 24 032 01-S | 24 032 01-S | 24 032 01-S | 24 032 01-S | 24 032 01-S |
| Bottom Seal | 52 032 08-S | 52 032 08-S | 52 032 08-S | 52 032 08-S | 52 032 08-S | 52 032 08-S |
| Fuel Solenoid | N/A | N/A | N/A | 24 757 22-S | 24 757 45-S | 24 757 50-S |
| Knob for AC | 25 324 02-S | 25 341 04-S | 25 324 02-S | 25 341 04-S | 25 324 02-S | 25 324 02-S |
| Breather Gasket | 24 041 51-S | 24 041 51-S | 24 041 51-S | 24 041 51-S | 24 041 51-S | 24 041 51-S |
| Flywheel Key | X-42-15-S | X-42-15-S | X-42-15-S | X-42-15-S | X-42-15-S | X-42-15-S |
| Fuel Pump | 24 393 16-S | 24 393 16-S | 24 393 16-S | 24 393 16-S | 24 393 16-S | 24 393 16-S |
| Carb | 24 853 92-S | 24 853 97-S | 24 853 92-S | 24 853 50-S | 24 853 108-S | 24 853 103-S |

2/9/2007

# Kohler Courage Pro 27 hp

## Basic Architecture

- Air Cooled
- 90º V-twin Design
- Over Head Valve (OHV)
- Aluminum Alloy w/ Cast Iron Liners
- Full Pressure Lubrication
- Bore & Stroke - 725 cc: 83 mm x 67 mm
- Maximum Torque (ft. lbs.):

| HP | 20 | 23 | 25 | 27 |
|---|---|---|---|---|
| Max. Torque | 38.4 | 43.5 | 44.8 | 45.4 |

- Weight: 91 lbs.
- Oil Capacity: 2 qt. (1.9L)
- Dimensions (L x W x H in.): 18.5 x 17.8 x 14.1”

# Kohler Courage Pro 27 hp

## Spare Parts, Recommended

| | | Engine Quantity | |
|---|---|---|---|
| Part No. | Description | 5+ | 10+ |
| 24 032 19-S | Seal Oil, Front | 1 | 2 |
| 25 032 06-S | Seal Oil, Rear | 1 | 2 |
| 25 050 34-S | Filter, Oil | 5 | 10 |
| 24 841 03-S | Kit, Head Gasket | 1 | 3 |
| 24 099 03-S | Switch, Oil Pressure | 1 | 1 |
| 24 584 52-S | Module, Ignition | 1 | 2 |
| 41 403 10-S | Regulator-Rectifier | 1 | 1 |
| 25 132 12-S | Spark Plug | 2 | 4 |
| 24 050 13-S | Filter, Fuel | 3 | 5 |
| 24 393 16-S | Pump, Fuel | 1 | 2 |
| 32 853 12-S | Carburetor | 1 | 2 |
| 24 757 46-S | Kit, Carb. Repair | 1 | 2 |
| 32 083 08-S | Element, Air Filter | 3 | 5 |
| 32 083 06-S | Precleaner | 3 | 5 |
| 32 755 01-S | Overhaul Gasket Set | 1 | 2 |
| 24 041 49-S | Gasket, Exhaust | 2 | 2 |
| 32 411 04-S | Rod, Push | 2 | 2 |
| 32 098 01-S | Starter, Electric | 1 | 2 |
| 32 522 02 | Short Block | 0 | 1 |

| 19HP Kawasaki Engine | | | 25HP Kawasaki Engine | | |
|---|---|---|---|---|---|
| FH601V TOP 50 PARTS | | | FH721V TOP 50 PARTS | | |
| | | | | | |
| RANK | ITEM NUMBER | DESCRIPTION | RANK | ITEM NUMBER | DESCRIPTION |
| 1 | 49065-2078 | OIL FILTER | 1 | 49065-2078 | OIL FILTER |
| 2 | 49019-7001 | FILTER-FUEL | 2 | 49019-7001 | FILTER-FUEL |
| 3 | 49065-2071 | OIL FILTER | 3 | 49065-2071 | OIL FILTER |
| 4 | 11013-7009 | ELEMENT-AIR FILTER | 4 | 11013-7009 | ELEMENT-AIR FILTER |
| 5 | 11013-7024 | ELEMENT-AIR FILTER | 5 | 11013-7024 | ELEMENT-AIR FILTER |
| 6 | 11060-7016 | GASKET | 6 | 11060-7016 | GASKET |
| 7 | 670D2016 | O RING | 7 | 11013-7027 | ELEMENT-AIR FILTER |
| 8 | 11013-7027 | ELEMENT-AIR FILTER | 8 | 21171-7013 | COIL-ASSY-IGNITION |
| 9 | 21171-7013 | COIL-ASSY-IGNITION | 9 | 11013-7020 | ELEMENT-AIR FILTER |
| 10 | 11013-7020 | ELEMENT-AIR FILTER | 10 | 670D2016 | O RING |
| 11 | 92049-7001 | SEAL-OIL | 11 | 92049-7001 | SEAL-OIL |
| 12 | 11029-7012 | ELEMENT-AS | 12 | 11013-7019 | ELEMENT-AIR FILTER |
| 13 | 11013-7019 | ELEMENT-AIR FILTER | 13 | 11029-7012 | ELEMENT-ASSY |
| 14 | 12011-2056 | COLLET | 14 | 12011-2056 | COLLET |
| 15 | 92210-0003 | NUT | 15 | 92210-0003 | NUT |
| 16 | 11060-7013 | GASKET,ROCKER | 16 | 59071-7004 | JOINT |
| 17 | 59071-7004 | JOINT | 17 | 11060-7013 | GASKET,ROCKER |
| 18 | 92049-7011 | SEAL-OIL | 18 | 92049-7011 | SEAL-OIL |
| 19 | 49116-7001 | VALVE-ASSY | 19 | 49116-7001 | VALVE-ASSY |
| 20 | 92072-7009 | BAND | 20 | 92171-7005 | CLAMP |
| 21 | 172G0818 | STUD 8X18 | 21 | 92072-7009 | BAND |
| 22 | 49040-7001 | PUMP-FUEL | 22 | 92049-7010 | SEAL-OIL,S |
| 23 | 92049-7010 | SEAL-OIL | 23 | 172G0818 | STUD 8X18 |
| 24 | 21163-7010 | STARTER-ELECTRIC | 24 | 49040-7001 | PUMP-FUEL |
| 25 | 317R0800 | NUT | 25 | 21163-7010 | STARTER-ELECTRIC |
| 26 | 92171-7005 | CLAMP | 26 | 317R0800 | NUT |
| 27 | 12009-7001 | RETAINER-VALVE | 27 | 11060-7011 | GASKET |
| 28 | 11060-7011 | GASKET | 28 | 12009-7001 | RETAINER-VALVE |
| 29 | 92049-7005 | SEAL-OIL | 29 | 92049-7005 | SEAL-OIL |
| 30 | 11004-7006 | GASKET-HEAD | 30 | 11004-7006 | GASKET-HEAD |
| 31 | 92004-7006 | STUD | 31 | 92004-7006 | STUD |
| 32 | 11029-7015 | ELEMENT-ASSY A/F | 32 | 92004-7009 | STUD |
| 33 | 130G0612 | BOLT,FLANGED | 33 | 130G0612 | BOLT,FLANGED |
| 34 | 92004-7009 | STUD | 34 | 11029-7015 | ELEMENT-ASSY |
| 35 | 92210-7004 | NUT | 35 | 11065-7006 | CAP |
| 36 | 11065-7006 | CAP | 36 | 92210-7004 | NUT |
| 37 | 11011-6001 | CASE/NUT A | 37 | 11011-6001 | CASE/NUT A |
| 38 | 21066-7011 | REGULATOR-VOLTAGE | 38 | 21066-7011 | REGULATOR-VOLTAGE |
| 39 | 11060-7024 | GASKET | 39 | 92210-7019 | NUT |
| 40 | 11060-7012 | GASKET,CRANKCASE | 40 | 11060-7012 | GASKET,CRANKCASE |
| 41 | 92140-7002 | BALL | 41 | 11060-7024 | GASKET |
| 42 | 92153-7019 | BOLT | 42 | 92140-7002 | BALL |
| 43 | 130T0850 | BOLT-FLANGED | 43 | 92153-7019 | BOLT |
| 44 | 92066-7003 | PLUG | 44 | 130T0850 | BOLT-FLANGED |
| 45 | 311B0600 | NUT 6MM | 45 | 92066-7003 | PLUG |
| 46 | 92015-2253 | NUT | 46 | 311B0600 | NUT 6MM |
| 47 | 92009-2341 | SCREW | 47 | 92015-2253 | NUT |
| 48 | 461F0800 | WASHER SPRING | 48 | 92171-7009 | CLAMP |
| 49 | 13116-7002 | ROD-PUSH | 49 | 92009-2341 | SCREW |
| 50 | 92171-7009 | CLAMP | 50 | 13116-7002 | ROD-PUSH |

| 26 HP Liquid Cooled Kawasaki Engine | | |
|---|---|---|
| FD731V TOP 50 PARTS | | |
| | | |
| RANK | ITEM NUMBER | DESCRIPTION |
| 1 | 49065-2078 | OIL FILTER |
| 2 | 670D2016 | O RING |
| 3 | 59071-7004 | JOINT |
| 4 | 11013-7019 | ELEMENT-AIR FILTER |
| 5 | 49040-7001 | PUMP-FUEL |
| 6 | 172G0818 | STUD 8X18 |
| 7 | 130G0612 | BOLT,FLANGED |
| 8 | 317R0800 | NUT |
| 9 | 461F0800 | WASHER SPRING |
| 10 | 311B0600 | NUT 6MM |
| 11 | 11065-7006 | CAP |
| 12 | 670B2011 | "O" RING |
| 13 | 92150-2182 | BOLT |
| 14 | 92049-2100 | SEAL-OIL |
| 15 | 49063-1055 | SEAL-MECHANICAL |
| 16 | 92043-1037 | PIN,DOWEL |
| 17 | 92171-7009 | CLAMP |
| 18 | 411B0600 | WASHER PLAIN |
| 19 | 92015-1193 | NUT-FLANGED |
| 20 | 510A5100 | WOODRUFF KEY |
| 21 | 21039-2059 | BRUSH |
| 22 | 11009-2346 | GASKET |
| 23 | 11065-7008 | CAP |
| 24 | 670B1509 | "O" RING,9 |
| 25 | 130G0635 | BOLT,FLANGED |
| 26 | 13081-2108 | CLUTCH ASSY |
| 27 | 27010-2182 | SWITCH, TEMP |
| 28 | 12011-2052 | COLLET |
| 29 | 11061-2075 | GASKET |
| 30 | 92042-014 | PIN GEAR |
| 31 | 42036-2060 | SLEEVE-GOV |
| 32 | 312B0600 | NUT 6MM |
| 33 | 410B1000 | WASHER PLAIN |
| 34 | 92037-1173 | CLAMP,SPARK PLUG |
| 35 | 56070-2066 | LABEL-WARNING |
| 36 | 21040-2052 | SPRING-BRUSH |
| 37 | 92144-2346 | SPRING |
| 38 | 11009-2766 | GASKET-PRS |
| 39 | 600A1300 | BALL,STEEL |
| 40 | 16183-2006 | FLOAT-ASSY |
| 41 | 92093-2115 | SEAL |
| 42 | 49065-2086 | FILTER-OIL |
| 43 | 16154-2054 | ROTOR-PUMP |
| 44 | 11011-7014 | CASE-AIR FILTER |
| 45 | 130G0650 | BOLT-FLANGED |
| 46 | 92170-2043 | CLAMP |
| 47 | 16154-2053 | ROTOR-PUMP |
| 48 | 11061-2091 | GASKET-COVER |
| 49 | 171G0818 | STUD, 8X18 |
| 50 | 12009-2060 | RETAINER |

| Briggs & Stratton Engine | 20hp | 18.5hp | 15.5hp |
|---|---|---|---|
| **Part Description** | **44K777** | **31Q777** | **386777** |
| Oil Filter | 492932s | 696854 | 492932s |
| Fuel Filter | 695666 | 695666 | 691035 |
| Carb OH kit | 792455 | 699521 | 842261 |
| Fuel Pump | 808656 | 697153 | 692519 |
| Air Filter | 792105 | 697153 | 692519 |
| Pre Cleaner | 792303 | 697015 | 692520 |
| Coil | 691060 | 492341 | 492341 |

| Tools | All Models |
|---|---|
| Spark Tester | 19368 |
| Digital Tach | 19389 |
| Flywheel Holder | 19433 |
| Universal Socket | 19353 |
| Valve Adj. Set | 19465 |
| Leakdown Tester | 19545 |

| Repair Manual | |
|---|---|
| Vanguard V-Twin | 272144 |
| Single OHV | 272147 |
| Intek V-Twin | 273521 |

COUNTRY CLIPPER
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# 2009 Belt and Blade Quick Reference Guide & Misc.

## Zero-turn Mowers

| Model | Deck Belt | Engine to Deck Belt | Hydro Belt | Low-Lift Blade | Hi-Lift Blade | Fusion Blade | Gator Blade | Mulch Kit |
|---|---|---|---|---|---|---|---|---|
| JAZEE ONE 38" | D-3727-W | | D-3754 | H-2422 | H-2423 | | H-2430 | MKJ38 |
| JAZEE ONE 42" | D-3733-W | | D-3754 | H-1665 | H-1715 | | H-2013 | MKB42 |
| | | | | | | | | |
| JAZEE 42" | D-3727-W | | D-3728 | H-1665 | H-1715 | | H-2013 | MKB42 |
| JAZEE 48" | D-3727-W | | D-3728 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE 48" Double Idler | D-3733-W | | D-3728 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE 52" | D-3776-W | | D-3728 | H-2387 | H-2246 | | H-2251 | MKJ52 |
| JAZEE 42" (SR205/210) | D-3727-W | | D-3524 | H-1665 | H-1715 | | H-2013 | MKB42 |
| JAZEE 48" (SR205/210) | D-3733-W | | D-3524 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE 52" (SR205/210) | D-3776-W | | D-3524 | H-2387 | H-2246 | | H-2251 | MKJ52 |
| | | | | | | | | |
| JAZEE TWO/PRO 48" | D-3727-W | | D-3728 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE TWO/PRO 48" (SR300/350) | D-3733-W | | D-3728 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE TWO/PRO 52" (SR300/350) | D-3733-W | | D-3728 | H-2387 | H-2246 | | H-2251 | MKJ52 |
| JAZEE PRO 48" (SR355) | D-3733-W | | D-3524 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE PRO 48" (SR360) | D-3775-W | | D-3524 | H-1666 | H-1714 | | H-2202 | MKB48 |
| JAZEE PRO 52"/60" (SR355/360) | D-3776-W | | D-3524 | H-2387 | H-2246 | | H-2251 | MKJ52 |
| | | | | | | | | |
| "04" Series 52" | D-3635 | D-3645 | D-3664 | H-2387 | H-2246 | H-2499 | H-2251 | MK52 |
| "04" Series 60" | D-3389 | D-3645 | D-3664 | H-1667 | H-1708 | H-2500 | H-2203 | MK60 |
| | | | | | | | | |
| Zeton Brat 42" | D-3684 | D-3692 | D-3671 | H-1665 | H-1715 | | H-2013 | MKB42 |
| Zeton Brat 48" | D-3635 | D-3686 | D-3671 | H-1666 | H-1714 | | H-2202 | MKB48 |
| Zeton 52" | D-3635 | D-3645 | D-3671 | H-2387 | H-2246 | H-2499 | H-2251 | MK52 |
| Zeton 60" | D-3389 | D-3645 | D-3671 | H-1667 | H-1708 | H-2500 | H-2203 | MK60 |
| Zeton 72" | D-3724 | D-3645 | D-3671 | H-2397 | H-2459 | H-2501 | N/A | N/A |
| | | | | | | | | |
| ***Charger*** 48" | D-3727-W | | D-3769 | H-1666 | H-1714 | | H-2202 | MKB48 |
| ***Charger*** 52" | D-3733-W | | D-3769 | H-2387 | H-2246 | H-2499 | H-2251 | MK52 |
| ***Charger*** 60" | D-3764-W | | D-3769 | H-1667 | H-1708 | H-2500 | H-2203 | MK60 |
| ***Charger*** 48" Double Idler | D-3775-W | | D-3769 | H-1666 | H-1714 | | H-2202 | MKB48 |
| ***Charger*** 52" Double Idler | D-3776-W | | D-3769 | H-2387 | H-2246 | H-2499 | H-2251 | MK52 |
| ***Charger*** 60" Double Idler | D-3776-W | | D-3769 | H-1667 | H-1708 | H-2500 | H-2203 | MK60 |
| | | | | | | | | |
| **BOSS SR-1200** 52" | D-3635 | D-3778 | D-3777-W | H-2387 | H-2246 | H-2499 | H-2251 | MK52 |
| **BOSS SR-1200** 60" | D-3389 | D-3778 | D-3777-W | H-1667 | H-1708 | H-2500 | H-2203 | MK60 |
| **BOSS SR-1200** 72" | D-3724 | D-3778 | D-3777-W | H-2397 | H-2459 | H-2501 | N/A | N/A |
| **BOSS SR-1205** 52" | D-3807 | D-3809 | D-3799 | H-2387 | H-2246 | H-2499 | H-2251 | MK52 |
| **BOSS SR-1205** 60" | D-3796 | D-3809 | D-3799 | H-1667 | H-1708 | H-2500 | H-2203 | MK60 |
| **BOSS SR-1205** 72" | D-3797 | D-3796 | D-3799 | H-2397 | H-2459 | H-2501 | N/A | N/A |

## Wide Area Walk-Behind

| Model | Blade Belt | Gear Drive Trans. Belt | Wheel Belt | Hydro Belt | Hi-Lift Blade | Fusion Blade | Gator Blade | Mulch Kit |
|---|---|---|---|---|---|---|---|---|
| Gear Trek 36" | D-3684 | D-3699 | D-3688 | N/A | H-2246 | | H-2251 | MKW-36 |
| Gear Trek 48" | D-3606 | D-3699 | D-3698 | N/A | H-1714 | | H-2202 | MKB48 |
| | | | | | | | | |
| Hydro Trek 36" | D-3684 | N/A | D-3688 | D-3670 | H-2246 | | H-2251 | MKW-36 |
| Hydro Trek 48" | D-3606 | N/A | D-3698 | D-3670 | H-1714 | | H-2202 | MKB48 |

## Miscellaneous Items

| | | | | | | |
|---|---|---|---|---|---|---|
| Hydro Filter | H-2026 | | | JAZEE PRO Hydro Cooling Fan | H-2455 | |
| Clutch Switch | E-6403 | | | JAZEE ONE Hydro Cooling Fan | H-2410 | |
| Key Switch | E-5873 | | | JAZEE Hydro Cooling Fan Kit | H-2539 | |
| Solenoid | E-6054 | | | JAZEE PRO Hydro Filter | H-2567 | |
| Seat Switch | E-6374 | | | JAZEE PRO Hydro Tank | D-3791 | |
| Red Paint | C-6126 | | | | | |

# Country Clipper Model Identification Codes

## Commercial Models

| Zeton Brat | Engine | HP | Cooling | Series | Cylinders | Spec# | Canister Filter | Carburation | Transmission |
|---|---|---|---|---|---|---|---|---|---|
| 1706KAJ/KAT | Kawasaki | 17 | Air | Twin-V | Single | FH500V-AS33 | No | Carb | BDP-10A |
| 1906KAJ/KAT | Kawasaki | 19 | Air | Twin-V | Twin | FH601V-DS06 | No | Carb | BDP-10A |
| **"04" Series** | | | | | | | | | |
| 2304M/MT | Kohler | 23 | Air | Command | Twin | PS755-68 | No | Carb | BDU-10L |
| 2304KA | Kawasaki | 23 | Air | Twin-V | Twin | FH680V-BS07 | No | Carb | BDU-10L |
| 2504M/MT | Kohler | 25 | Air | Command | Twin | PS-CV730-0010 | No | Carb | BDU-10L |
| **Zeton** | | | | | | | | | |
| 2505KOJ/KOT | Kohler | 25 | Air | Command | Twin | PS-CV730-0010 | No | Carb | BDP-10A |
| 2505KOJ/KOT | Kohler | 25 | Air | Command | Twin | PS-CV730-0030 | Yes | Carb | BDP-10A |
| 2505KAJ/KAT | Kawasaki | 25 | Air | Twin-V | Twin | FH721V-AS06 | No | Carb | BDP-10A |
| 2505KAJ/KAT | Kawasaki | 25 | Air | Twin-V | Twin | FH721V-AS23 | Yes | Carb | BDP-10A |
| 2605KOJ/KOT | Kohler | 26 | Air | Command | Twin | | No | EFI | BDP-10A |
| 2705KOJ/KOT | Kohler | 27 | Air | Command | Twin | PS-CV740-0012 | Yes | Carb | BDP-10A |
| **Zeton Boss** | | | | | | | | | |
| 2707KOJ/KOT | Kohler | 27 | Air | Command | Twin | PS-CV740-0012 | Yes | Carb | BDP-10A |
| **Charger - 2005 (and earlier)** | | | | | | | | | |
| 1948KAJC/KATC | Kawasaki | 19 | Air | Twin-V | Twin | FH601V-DS06 | No | Carb | BDP-10A |
| 2352KAJC/KATC | Kawasaki | 23 | Air | Twin-V | Twin | FH680V-BS07 | No | Carb | BDP-10A |
| 2352KAJC/KATC | Kawasaki | 23 | Air | Twin-V | Twin | FH680V-AS27 | Yes | Carb | BDP-10A |
| 2552/60KAJC/KATC | Kawasaki | 25 | Air | Twin-V | Twin | FH721V-AS23 | Yes | Carb | BDP-10A |
| 2048KOJC/KOTC | Kohler | 20 | Air | Command | Twin | PS655-95 | No | Carb | BDP-10A |
| 2348KOJC/KOTC | Kohler | 23 | Air | Command | Twin | PS755-68 | No | Carb | BDP-10A |
| 2348KOJC/KOTC | Kohler | 23 | Air | Command | Twin | PS755-43 | Yes | Carb | BDP-10A |
| 2352/60KOJC/KOTC | Kohler | 23 | Air | Command | Twin | PS755-43 | Yes | Carb | BDP-10A |
| 2552KOJC/KOTC | Kohler | 25 | Air | Command | Twin | PS-CV730-0030 | Yes | Carb | BDP-10A |
| 2760KOJC/KOTC | Kohler | 27 | Air | Command | Twin | PS-CV740-0012 | Yes | Carb | BDP-10A |
| **BOSS - 2005** | | | | | | | | | |
| 2552KAJB/KATB | Kawasaki | 25 | Air | Twin-V | Twin | FH721V-AS23 | Yes | Carb | BDP-10A |
| 2652/60KALJB/KALTB | Kawasaki | 26 | Liquid | Twin-V | Twin | FD731V-AS01-01 | Yes | Carb | BDP-10A |
| 2752/60/72KOJ/KOT | Kohler | 27 | Air | Command | Twin | PS-CV740-0012 | Yes | Carb | BDP-10A |
| **Charger - SR1000/SR1005/SR1010** | | | | | | | | | |
| 1948KAJ/KAT | Kawasaki | 19 | Air | Twin-V | Twin | FH601V-DS06 | No | Carb | BDP-10A |
| 2048KOJ/KOT | Kohler | 20 | Air | Command | Twin | PS655-95 | No | Carb | BDP-10A |
| 2352/60KOJ/KOT | Kohler | 23 | Air | Command | Twin | PS755-43 | Yes | Carb | BDP-10A |
| 2552/60KAJ/KAT | Kawasaki | 25 | Air | Twin-V | Twin | FH721V-AS23 | Yes | Carb | BDP-10A |
| 2760KOJ/KOT | Kohler | 27 | Air | Command | Twin | PS-CV740-0012 | Yes | Carb | BDP-10A |
| **BOSS - SR1200/SR1205** | | | | | | | | | |
| 2552KAJ/KAT | Kawasaki | 25 | Air | Twin-V | Twin | FH721V-AS23 | Yes | Carb | BDP-12A |
| 2652/60/72KALJ/KALT | Kawasaki | 26 | Liquid | Twin-V | Twin | FD731V-AS01-01 | Yes | Carb | BDP-12A |
| 2752/60/72KOJ/KOT | Kohler | 27 | Air | Command | Twin | PS-CV740-0012 | Yes | Carb | BDP-12A |
| 2860/72KOJ/KOT | Kohler EFI | 28 | Air | Command | Twin | PS-CV745-009 | Yes | EFI | BDP-12A |
| 3060/72KOJ/KOT | Kohler | 30 | Air | Command | Twin | PS-CV750-0013 | Yes | Carb | BDP-12A |
| 3160/72KOJ/KOT | Kawasaki | 31 | Air | Twin-V | Twin | FX850V-AS00-R | Yes | Carb | BDP-12A |
| 3760/72KAJ/KAT | Kawasaki | 37 | Air | Twin-V | Twin | FX1000V-AS00-R | Yes | Carb | BDP-12A |

## Residential Models

| JAZEE ONE (pre-2006) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1638/42KOJI | Kohler | 16 | Air | Command | Single | PS-26520 | No | Carb | EZT |
| 1738/42KOJI | Kohler | 17 | Air | Courage | Single | SV530-0006 | No | Carb | EZT |
| **JAZEE ONE -SR100/SR105/SR110** | | | | | | | | | |
| 15538BSJ-SR100 | Briggs | 15.5 | Air | Intek-ELS | Single | 31E6770134E1 | No | Carb | EZT |
| 18538BSJ-SR100/SR105 | Briggs | 18.5 | Air | Intek-ELS | Single | 31Q7770115B1 | No | Carb | EZT |
| 18542BSJ-SR100/SR105 | Briggs | 18.5 | Air | Intek-ELS | Single | 31Q7770115B1 | No | Carb | EZT |
| 2038BSJ-SR100/SR110 | Briggs | 20 | Air | Intek-ELS | Single | 33M6770123G1 | No | Carb | IZT |
| 2042BSJ-SR100/SR110 | Briggs | 20 | Air | Intek-ELS | Single | 33M6770123G1 | No | Carb | IZT |
| **JAZEE** (pre-2006) | | | | | | | | | |
| 1742/48/52KOJ | Kohler | 17 | Air | Command | Single | PS-27514 | No | Carb | IZT |
| 1842/48KOJ | Kohler | 18 | Air | Command | Single | PS-27533 | No | Carb | IZT |
| 1948/52KAJ | Kawasaki | 19 | Air | Twin-V | Twin | FH601V-DS06 | No | Carb | IZT |
| 2042/48/52BSJ | Briggs | 20 | Air | Intek-ELS | Twin | 40G7770116E1 | No | Carb | IZT |
| 2042/48/52KOJ | Kohler | 20 | Air | Command | Twin | PS655-95 | No | Carb | IZT |
| **JAZEE - SR200/SR205/SR210** | | | | | | | | | |
| 18542/48BSJ-SR200/205 | Briggs | 18.5 | Air | Intek-ELS | Single | 31Q4440112E1K1012 | No | Carb | EZT |
| 2042/48/52BSJ-SR200 | Briggs | 20 | Air | Intek-ELS | Twin | 40G7770116E1 | No | Carb | EZT |
| 2248BSJ-SR205 | Briggs | 22 | Air | Intek-ELS | Twin | 44K77926403 | No | Carb | EZT |
| 2352KOJ-SR205 | Kohler | 23 | Air | Command | Twin | PS755-68 | No | Carb | EZT |
| | Briggs | 26 | Air | Intek-ELS | Twin | 44P7770132G1 | No | Carb | EZT |
| **JAZEE TWO** (pre-2006) | | | | | | | | | |
| 2048/52KOJ/KOTII | Kohler | 20 | Air | Command | Twin | PS655-95 | No | Carb | CIZT |
| **JAZEE TWO - SR300** | | | | | | | | | |
| 2348/52KOJ-SR300 | Kohler | 23 | Air | Command | Twin | PS755-68 | No | Carb | CIZT |
| **JAZEE PRO - SR350** | | | | | | | | | |
| 1948/52KAJ/KAT-SR350 | Kawasaki | 19 | Air | Twin-V | Twin | FH601V-DS06 | No | Carb | CIZT |
| 2048/52KOJ/KOT-SR350 | Kohler | 20 | Air | Command | Twin | PS655-95 | No | Carb | CIZT |
| 2348/52KOJ/KOT-SR350 | Kohler | 23 | Air | Command | Twin | PS755-68 | No | Carb | CIZT |
| 2352BVJ/BVT-SR350 | Briggs | 23 | Air | Intek-ELS | Twin | 3867770118E1 | No | Carb | CIZT |
| **JAZEE PRO - SR355/360** | | | | | | | | | |
| 1948/52KAJ/KAT-SR355 | Kawasaki | 19 | Air | Twin-V | Twin | FH601V-DS06 | No | Carb | ZT2800 |
| 2148/52KAJ/KAT-SR350/SR360 | Kawasaki | 21 | Air | Twin-V | Twin | FH641V-W00-R | No | Carb | ZT2800 |
| 2348/52/60KOJ/KOT-SR355 | Kohler | 23 | Air | Command | Twin | PS755-68 | No | Carb | ZT2800 |
| 2352BVJ/BVT-SR355 | Briggs | 23 | Air | Intek-ELS | Twin | 3867770118E1 | No | Carb | ZT2800 |
| 2748/52/60KOJ/KOT-SR360 | Kohler | 27 | Air | Courage Pro | Twin | PS-SV840-0013 | No | Carb | ZT2800 |